

Chas. Styr

Practical Essays
UPON
INTERMITTING FEVERS,
DROPSIES,
DISEASES OF THE LIVER,
THE
EPILEPSY,
THE
COLIC,
DYSENTERIC FLUXES,
AND THE
OPERATION of CALOMEL,

By DANIEL LYSONS, M. D.
PHYSICIAN at BATH, *K*
And late Fellow of ALL SOULS COLLEGE, OXFORD.

Authorum vel maxime celebrium decreta medica
haud facile recipienda sunt quæ non multiplex
usus firmaverit.

Friend de Febris, commentar. vii. p. 287.

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M.DCC.LXXII.



TO THE

Honourable and Reverend

George Talbot, L. L. D.

VICE PRESIDENT

OF THE

INFIRMARY at GLOUCESTER.

Reverend Sir,

MOST of the following
cases having been col-
lected during my six years
attendance upon the *Gloucester*
Infirmary, I know of no one to
a 2 whom

iv *DEDICATION.*

whom I can with so much propriety address them, as to the survivor of the three eminent persons, who zealously exerted themselves in the establishment of that useful charity.

The activity, and assiduity of his excellency Lord Boteourt, together with his unbounded liberality (part of which only makes a very considerable figure in the table of benefactors to the hospital) shew the goodness of his heart,
and

DEDICATION. v

and mark the share he had in promoting so charitable an undertaking.

To the Right Reverend Martin Benson, Lord Bishop of Gloucester at the time of its institution, the infirmary stands in a great measure indebted for its excellent rules and orders, as well as for several considerable benefactions.

By mentioning the assistance you gave upon this occasion, I am sensible I should offend
your

vi *DEDICATION.*

your modesty, equally conspicuous with the goodness of your heart. I cannot however pass over one circumstance in your conduct, which I am confident you will excuse, because it may prove an example to others, I mean your attendance upon the four general quarterly courts; from which duty nothing but absolute necessity ever detains you.

I hope the advantage of such attendance will never be known by bad consequences
arising

vii DEDICATION.

arising from your absence,
especially as Dr. Stonehouse,
being well acquainted with
the nature of hospitals, in his
sermon preached at the last
anniversary meeting of that in
Salisbury says, ‘ It is evident
‘ from facts, that all charities
‘ of this kind have flourished,
‘ or declined, in proportion as
‘ the governors have given
‘ their *personal* attendance, or
‘ not.’

That you may long con-
tinue a friend, and protector
of

DEDICATION. viii

of the Gloucester infirmary,
an ornament to your profes-
sion, and an example of pub-
lic, and private virtue to the
world, is the sincere wish of
all that know you, as well as
of one, who is

With the greatest respect,

S I R,

Your most obedient,

Humble Servant,

BATH,
APRIL 24, 1772.

DANIEL LYSONS.

P R E F A C E.

OBSERVATIONS upon diseases, and the effects of medicines are generally allowed to have laid the first foundation of the art of Physic. We are told by the most ancient authors who have wrote upon this subject that the Babylonians, and Egyptians used to carry their sick into the streets in order to ask advice from such passengers as had happened to have seen others affected in the

b

same

same manner. If the patients survived an account of the symptoms, and the medicines used for their recovery, were recorded to posterity, by being engraven upon tables of stone, and placed in the temple of Æsculapius. And from a collection of such materials was the first system of Physic formed.

As men carried their enquiries farther, and began to search for the seat of diseases by dissection, new lights were thrown upon the medical art; and new theories were started, according to the disposition, and ingenuity of the professor. But it is to be remarked,
that

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that from the first dawning of Physic as a science, even to the present time, no theory could ever maintain its ground, except it was supported by just and accurate observations faithfully related. To be convinced of this, we need look no farther back than to the accounts we have of the different kinds of treatment the small-pox has undergone at different times, and the various success attending them.

It was the opinion of physicians formerly, that as much as possible of the variolous matter should be thrown out upon the external
b 2 parts,

xii P R E F A C E.

parts, since any of it remaining in the habit might taint the whole mass of humours, and endanger life. Upon this principle cordial medicines were prescribed, a warm regimen of diet directed, and the patient ordered to be kept in bed, well covered with cloaths, and secured from the air. Neither were any opening medicines suffered to be given until the Fever subsided; least nature might be hindered in her endeavours to expel the morbid matter by the pores of the skin.

Sydenham, by experience perceiving the evil tendency of this doctrine,

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doctrine, ordered his patients to be kept cool, and even to be taken out of their beds, and exposed to the air every day; not only to cool their highly enflamed bodies, but also with a view to promote the secretion of urine.

Doctor Friend likewise added to the establishment of the cooling method, by ordering purges in the small-pox sooner than they had formerly been used. But what contributed mostly to destroy the hot regimen was the number of cases published by Friend, which carried conviction with them against the obstinacy, and perverseness,

ness, of his opponents, although very considerable in their profession, and much prejudiced in their opinions, against his practice. And upon this occasion he lays down the useful maxim I have chosen as a motto to my title page. That the theories even of the most celebrated physicians are not readily to be admitted as true, until confirmed by manifold experience.

As experience in Physic contributes so much either to confirm, and establish a theory if true, or to set it aside if erroneous, I cannot but look upon my time as usefully

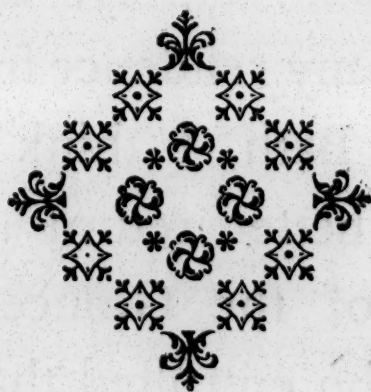
P R E F A C E. xv

fully employed whilst I attempt to describe such cases in the practice of my profession as have appeared to me uncommon, or where particular medicines have been attended with any remarkable good, or bad success.

Upon this principle I have laid together the following sheets. But I have also another view in this publication, namely, that having removed my residence from Gloucester to Bath, I think I cannot make a better return to the governors of the Gloucester infirmary, who entrusted that hospital to my sole care, than to make
public

xvi P R E F A C E.

public any uncommon instances of success in practice that fell under my inspection whilst I attended that charitable institution: by which if the bounds of Physic should be neither enlarged, nor secured, I shall at least enjoy the satisfaction of having discharged a debt of gratitude.



CON-

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Formulæ

Formulæ Medicamentorum.

No. I.

Pulvis Febrifugus.

- R. Cort. peruvian. pulv. ℥i.
Rad. serpentar. virginian. ℥ss. misce.
Sumat ʒii. vel ʒi. 4ta. quaque hora.

No. II.

Electarium Febrifugum.

- R. Pulv. febrifug. ℥i.
Syrup. e cort. aurant. ℥iii. m.
Sumat ʒii. 4ta. quaque hora.

No. III.

Electarium Peruvianum.

- R. Cort. peruvian. pulv. ℥i.
Syrup. simp. ℥iii. fiat electarium.
Sumat ʒii. 2da. quaque hora.

No. IV.

Electarium Aromaticum.

- R. Nucis moschatæ leviter torrefact.
Pulv. e bolo comp. cum. opio ana ℥i.
Cretæ

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Cretæ alb. ppt. ℥ii.
Syrup. simp. q. s. fiat electarium.
Sumat ℥i ter die cum decocto albo.

No. V.

Mistura astringens.

R. Pulv. e bolo comp. cum opio ℥iss.
Julep. cardiac. ℥viii. m.
Sumat cochl. ii, post sing. sedes liquidas.

No. VI.

Electarium Millepedatum.

R. Milleped. viv. Q. V.
Mellis Q. S. ut fiat electarium.
Sumat ℥i. bis die.

No. VII.

Pilulæ Martiales.

R. Pil. rufi.
Sal martis ana p. æ.
E sing. ℥i. fiant pil. iv. omni nocte sumendæ.

No. VIII.

Haustus Solutivus.

R. Infus. lenitiv. ℥iii.
Sal. glauber.
Syrup. rosar. solutiv.
Tinct. fenæ ana ℥ii. fiat haustus
Sumendus bis in 7. na.

No.

Formulae Medicamentorum. xxi

No. IX.

Infusum Lenitivum.

- R. Infus. fenæ commun. ℥iii.
Mannæ ℥i.
Aq. sem. carui ℥ii. m.
Sumend. bis in 7. na.
-

No. X.

Mistura Cardiaca.

- R. Aq. alexeter. simp. ℥v.
Spirituos. ℥i.
Confect. cardiac. ℥i. m.
Dosis sit coh. iii. ter die.
-

No. XI.

Pilulae Asthmaticæ.

- R. Rad. scill. ficcat. et pulv. ℥i.
Gum. Ammon. pulv. ℥ii.
Balf. sulph. simp. q. s. f. pil. 72. sumat iv,
bis die.
-

No. XII.

Lohoc.

- R. Sperm. ceti.
Conf. rosar. rubr. ana ℥ss.
Syrup. pectoral. q. s. f. lohoc.

No.

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No. XIII.

Electarium Sulphuratum.

- R. Elect. lenitiv.
Flor. sulph. lot. ana ℥i.
Symp. rosar. solut. q. s. f. electarium.
Sumat ℥i. bis die.
-

No. XIV.

Julepum Volatile.

- R. Aq. alexeter. simp. ℥v.
Spirituos. ℥i.
Sacchar. alb. ℥iss
Spirit. corn. cerv. volat. ℥ii. m.
Addendo nitri ℥iss.
Vel ol. olivar. ℥ii. fit.
Julepum volatile cum nitro.
Vel oleo.
Cochl. iv. fumenda ter die.
-

No. XV.

Bolus ad Diarrhæam.

- R. Rad. rhabarb. pulv. gr. xv.
Elect. e bolo comp. cum. opio. ℥ss.
Symp. zingiber. q. s. f. bolus.
Sumendus semel nocte.
-

No. XVI.

Pulvis Contrayerv. comp. cum. Nitro.

- R. Pulv. contrayerv. comp. ℥i.
Nitri gr. x. f. pulvis
Ter die fumendus.

No.

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No. XVII.

Mistura Salina.

- R. Sal. abfinth. ʒii.
 Succ limon ʒiii.
 Julep. commun. ʒvi. m.
Sumat cochil. ii. sexta quaque hora.
-

No. XVIII.

Bolus Solutivus.

- R. Elect. lenitiv. ʒi.
 Rad. Jalap. pulv. gr. viii.
 Zingib. pulv. gr. v.
 Syrup. simp. q. f. f. bolus, fumendus bis
in septimana.
-

No. XIX.

Pulvis Purgans.

- R. Rad. jalap. pulv. ʒfs.
 Sacchar. alb. ʒfs.
 Rad, zingib. pulv. gr. vi. m. fiat.
Pulvis, fumendus bis in 7na.
-

No. XX.

Infusum Hydropicum.

- R. Rad. gentian. ʒfs.
 Cort. aurant. ʒii.
 Rad. zedoar. ʒi
 Rad. raphan. rustic.
 Sem. finap. ana ʒfs

Canell.

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Canell. alb. ℥iss.
Aquæ bullient. q. f. ad. colaturæ ℥xxiv.
Cola, et adde.
Aq. fem. Carui. ℥ii. m.
Sumat ℥iv. bis die.

No. XXI.

Bolus e Calomel.

R. Mercur. dulc. sexies sublimat ℥ss
Conserv. cortic. aurant ℥i.
Syrup. simp. q. f. f. bolus, sumendus semel
in 7na hora somni.

No. XXII.

Decoctum Album.

R. Corn. cerv. calc. ℥vi.
Gum arabic ℥i. coque in
Ap. fontan. q. f. ad. colaturæ. cong. i.
et adde.
Spiritus vin. ten. lbs. m.
In diarrhœa bibat pro potu communi.

No. XXIII.

Electarium Cinnabarinum.

R. Cinnabar. Antimon.
Gum. guaiac. pulv. ana p. æ.
Rob. Sambuci q. f. fiat electarium.
Sumat ℥i. bis die, vel. q. f. ut alius semel, vel
bis in die deiciat.

A N

E S S A Y

U P O N

INTERMITTING FEVERS.

S E C T I O N I.

Of the Cause of an Intermitting Fever.

THE most general primary cause of Intermitting Fevers is an impure air, especially if assisted by an unwholesome coarse diet. It is not however every impure air that gives rise to Intermitting Fevers. A cool moist air is most productive of them, they being seldom found either in a very hot, or very cold climate.

A

Bontius,

Bontius, who resided at Batavia the chief city in the great island of Java, which lies in the East-Indian sea, within five degrees of the equator, tells us, that he never saw a Quartan Fever in those hot regions, excepting one or two which were brought there from other countries; and that the miserable bearers of them were soon hurried into dropxies, and thence to most certain death. A Tertian is also observed to arise in those parts so rarely, that he compares its appearance to that of one swallow, which is proverbially said to make no summer.*

Doctor Lind, who by his situation as physician to the Royal Hospital at Haslar near Portsmouth, has it in his power to collect intelligence from all parts of the world, especially in war time, and
has

* Jacobi Bontii Methodus medendi in Indiis Orientalibus, cap. xiv. sub titulo de febribus. et cap. xv. de febribus in insula Tymor, et Solor.

INTERMITTING FEVERS. 3

has published his observations on diseases incidental to Europeans in hot climates, confirms the above remarks made by Bontius. And tells us farther, that at other places in the East Indies, upon the coast of Guinea, and in general in all very hot countries Intermitting Fevers rarely occur, their most general Fever being of a malignant, putrid, remitting kind.*

In the cold countries we also find Intermitting Fevers not very frequent. Pleurifies, and other inflammatory disorders, are said to be the produce of the cold air at Quebec; but Low, Bilious, and Intermitting Fevers are scarcely ever known there.†

Linnæus boasts of the health of Sweden in winter; but in the spring Ter-
A 2 tian

* Lind's Essay upon the disorders incidental to Europeans in hot climates. Page 60.

† Lind's Essay, part 1. chap. 1. page 36.

tian Fevers are endemial at Upsal.† It is likewise observable in our island of Great-Britain that Intermitting Fevers are more frequent in the moderate seasons of spring and autumn, than in summer, or winter.

From the above observations it appears that a temperate air is most productive of Intermitting Fevers. And upon farther enquiry we shall find that neither Continual, nor Intermitting Fevers are ever epidemical, either in the warm, or cold climates, except where the air is moist, and rendered putrid, either by effluvia conveyed to it from other bodies, or by its own stagnation.

Bontius informs us that violent Malignant Fevers arose at Solor, and Tymor, two islands near Batavia, chiefly from unwholesome fogs; and at Batavia

† Linnæi Amœnitates academicæ volumen v. page 23.

tavia, by the patients exposing themselves to the cool dews in an evening.*

Dr. Lind supports this last account by the following very remarkable testimony.---“ During the sickly season at
 “ Batavia, a boat belonging to the
 “ Medway man of war, which attended
 “ on shore every night (to bring fresh
 “ provisions) was three times succe-
 “ ssively manned, not one of her crews
 “ having survived that service !†”

The dreadful effects of corrupted air in sultry climates are also evident from what happened at Bassora, a large, and populous town, situated upon

* Bontius de medicina Indorum, cap. xiv. xv. He says, being so near the line, the sun's rays having such an immense force upon the body, that the bile becomes very suddenly highly exalted, whence a Burning Continual Fever ensues, but never an Intermitting Fever.

† Lind's Essay, page 135.

upon the banks of the Tigris, and adjoining to the desarts of Arabia, where the Arabs, to revenge themselves for an injury done them by the Turks living at Bassora, cut down the banks of the river near the city, and cover'd the desarts in its neighbourhood with water. This stagnating, and putrifying, corrupted the whole atmosphere, and occasioned a Fever of which 12 or 14,000 of the inhabitants died, and not above two or three of the Europeans settled there escaped with life.†

He also observes, that “in all
“spots of the East-Indies situated near
“the muddy and impure banks of ri-
“vers, or the foul shores of the sea,
“the vapours exhaling from the putrid
“stagnated water, either fresh or salt,
“from large swamps, from corrupted
“vegetables, and other impurities,
“produce mortal diseases, especially
“during the rainy season.”*

As

† Lind's Essay, p. 100. * Loco citat, p. 77.

INTERMITTING FEVERS. 7

As the useful collection above referred to brings us in some degree acquainted with the diseases of the hot, and cold countries, without the hazard, and difficulty of visiting them, so we may learn from it, that the variable climate of our own island is not exempted from the putrid diseases of the Torrid, nor from the inflammatory complaints of the Frigid Zones; but that it is occasionally subject to the maladies incidental to both.

“ In the month of August 1765 the
“ quicksilver in Farenheit’s thermome-
“ ter often rose to eighty-two degrees
“ in the middle of the day,” at this
time “ the marines who were exer-
“ cised early in the morning on South-
“ Sea-Beach, from the effect of the
“ stagnant waters of an adjoining mo-
“ rals suffered much.

“ Half a dozen of them at a time
“ were frequently taken ill in their
“ ranks

“ ranks when under arms ; some being
“ seized with such a giddiness in the
“ head, that they could scarcely stand,
“ while others fell down speechless ;
“ and upon recovering their senses
“ complained of a violent head-ach.

“ When such patients were received
“ into the hospital I observed that some
“ few had a regular ague, but that far
“ the greater number laboured under
“ a Remitting Fever, with imperfect
“ intermissions, though sometimes in-
“ deed there was no perceptible re-
“ mission for several days. A constant
“ pain and giddiness of the head
“ were the most inseparable and dis-
“ tressing symptoms of this disease.
“ Some were delirious, and a few vo-
“ mited up a quantity of bile, but in
“ all the countenance was yellow.”*

The hundreds of Essex, and several
low situations in the county of Kent,
are

* Lind's Essay, pages 25, 26.

INTERMITTING FEVERS. 9

are remarkable for being often visited with Intermittent Fevers: and in general, throughout the whole island of Great-Britain, the inhabitants of all low, damp, marshy places are greatly troubled with that disorder. Now, from what I have seen of the hundreds of Essex, I think, that whoever observes the Bilious Fevers, very common there during an hot sickly season, will find them but very little different from the Continual, or Remitting East-Indian Fever before mentioned. And yet Fevers arising from the same cause, in the same place, in a cool spring, or autumn, constitute the regular Tertian, or Quartan Fever of our northern climate.

From the number of examples that have been produced it appears, that Fevers in general arise chiefly from an impure air, and that they differ as to their quality according to the temperature of the air the place where they

B arise

arise happens to enjoy at the time they are generated.

SECTION II.

Of the Cure of Intermittent Fevers.

PHYSICIANS agree that there is in all Fevers something, contrary to nature, which occasions, and keeps up the violent febrile commotion. And they have prescribed their remedies according to the particular opinion each has adopted respecting the original cause, and seat of the disease.

Those who apprehend the Bile to be in fault give medicines to correct its acrimony, and evacuate it. Where the disease has been supposed to exist in the lesser series of vessels sudorifics have
not

not been neglected. And where the weakness of the stomach has been thought the principal cause the bark has been depended upon.

The cure of a Tertian Fever has been observed to be easier effected than that of any other Intermittent. That of a Quotidan has been found more easy than that of a Quartan. And the removal of a Quartan has proved so difficult, as to cause even Sydenham to complain, that he knew of no successful method of treating it but by the bark, which rather checked its progress than removed the cause of the disease.*

The curative indications of an Intermittent Fever he says must be taken, either----1st, from a careful observation of the steps which nature takes to overcome the disease; that so we may

B 2 quicken

* Sydenhami Opera Univerſa. Sect. i. p. 57.

quicken the fermentation already raised, and by this means recover the patient, or 2dly, we must endeavour to investigate the specific cause, in order to remove the disease by effectual, and specific remedies.*

This very eminent, and candid physician acknowledges that he tried both these methods with great care and application, but had not been able to cure autumnal Intermittents without waiting a considerable time for the Fever to run a certain stated course, however disagreeable it had been to the patients to endure the disorder so long. And he then adds “ that if any one is possessed
“ of a certain method, or a specific remedy, that will not only stop the progress of, but thoroughly cure these disorders he ought to discover it for
“ the good of mankind: and pronounce

* Loco citato, p. 54.

“nounces him neither a wife, nor a
“good man if he does not.”*

The bark is the only medicine that at present seems to have any claim to the appellation of a specific, and was what Sydenham made use of. But its effects are often uncertain, and the time required for continuing its use frequently

* *Revera autem si quis inter mortales reperitur, qui sive methodo aliquâ certâ, sive remedio specifico adhibito, Februm harum intermittenti-um cursum non solum inhibere, sed etiam omnino abrumpere novit, existimo eum omni jure teneri, ut humano generi rem illam summopere expectandam patefaciat: quod si non fecerit, ego illum nec boni civis, nec prudentis viri nomen mereri pronunciare ausim; neque enim civis boni est, illud in rem suam vertere, quod toti generi humano tam ingens beneficium apportet; nec viri prudentis, divinâ benedictione semetipsum privare, quam à summâ bonitate liceret expectare, si ad publicum bonum promovendum se accingeret.—
*Ibidem.**

quently tedious. In the following sheets I shall attempt to point out a medicine, which, joined to the bark, I have found much more certain than the bark alone; and a method of treatment more concise, and effectual than any I have yet read, or heard of.

It has been an opinion, supported by many advocates formerly, that the pores of the skin being obstructed was the proximate, or immediate cause of an Intermitting Fever. Upon this foundation the practice of administering sudorifics in this disease was laid, and most of the modern writers have contributed their assistance in its support. Such medicines are not however to be given upon all occasions, and in all circumstances. Skill and judgment are required to avoid doing harm whilst we are endeavouring to do good, as appears by the cautions transmitted to us by Hoffman in the following cases.

1st. A robust soldier, after eating an hearty supper, went upon guard, and did his duty in a very foggy night; after which he was seized with a shivering, sickness at the stomach, and endeavour to vomit, which symptoms were followed by heat and anxiety.

These complaints returning again the third day the soldier hastened away to a surgeon, who on the day free from the Fever gave him a vomit upon an empty stomach seven hours before he expected a return of the fit, which operated violently, and occasioned a copious evacuation of bile. Upon the fever day, three hours before the fit was expected, he gave him a medicine the principal ingredient of which was white pepper to the quantity of fifteen grains, to be taken in a few spoonsfull of spirit of wine; and the patient was directed to drink a draught of ale well warmed after it. The soldier going to bed sweated plentifully, and the next
fit

fit of the ague was put by : and by a few more doses of the same powder the disorder was entirely removed.

2d. Not long afterwards a choleric young man, much given to anger and wine, came to the same surgeon, with the same complaint, and was treated in the same manner, but with a very different effect, his Tertian Ague being changed into a Burning Continual Fever, from which he escaped with difficulty.*

A variety of medicines from the vegetable, animal, and fossil kingdoms have been recommended by different authors as sudorifics in Intermitting Fevers.

Amongst these I am surprized to find camphire so much neglected, even by Hoffman,

* Hoffmanni enarrationes morborum sub titulo de Febre tertiana Observatio nona.

Hoffman, who in general speaks much in its praise as a febrifuge. This medicine is twice mentioned in Dr. Lind's Essay on the diseases of hot countries as the most sovereign remedy in the beginning of the East-Indian Fever, before an opportunity offers of giving the bark.* I have already shewn in my Essay on the Effects of Camphire the great success I experienced with it in the beginnings of Continual Fevers, when formed into a bolus with a few grains of nitre : and have observed that the same bolus, given twice or three times a day between the fits, has been of great service in removing Intermitting Fevers. But having known it fail

C in

* Vomits, blisters, camphire and the bark were the only things that merited the title of remedies in this disease. Part i. ch. 2d. p. 62. Camphire was found the best medicine in the fit. Bark, and other antiseptics were administered in large quantities after first giving an emetic, and emptying the bowels. Part i. ch. 3. p. 30.

in some instances, I have for several years past used upon such occasions a powder composed of Virginian snake-root, and bark.

SECTION III.

*Of the use of snakeroot and bark in
Intermitting Fevers.*

WHEN the intermissions between the fits are clear; and no particular symptom contraindicates the use of this medicine, it is really surprizing to observe what it will do, without any previous preparation. But when the first passages are loaded, or obstructed, they must be cleared before any febrifuge can take effect.

My

My common dose to adults is two scruples of bark to one of snakeroot. Two or three doses will rarely fail putting a stop to any distinct Tertian, or Quartan Ague. And should a farther repetition be necessary it will be attended with this advantage, that the disorder will be less likely to return, than when stopped by the bark alone.

In Quotidian Agues there is seldom a sufficiently clear intermission between the fits to give this powder at first; but after a clear intermission of some hours has been obtained by other means, then this powder is equally effectual in Quotidian, as in Tertian, or Quartan Fevers, as will appear by the following cases.

C A S E I.

Doctor Lewis of Oxford being in consultation with me upon the case of a daughter belonging to Mr. John

C 2

Cripps,

Cripps, a very eminent wool-stapler at Cirencester, one of his servants ----- Paget, a strong made young man, being much weakened, and emaciated by the periodical attacks of a Regular Ague for six months preceding, was, on the 27th of December, 1759, brought to us for our assistance.

I acquainted the Doctor with the great success I had often experienced with large doses of the febrifuge powder above mentioned: and he consented to my ordering it in the full quantities of a scruple of snakeroot to two of the bark; to be taken in a glass of water three times in a day between the fits. The patient took three doses, without any preparation, and was perfectly cured, having no occasion for a repetition of his medicine, or suffering any relapse of his disorder.

CASE

C A S E II.

Mary M'Kenny, aged 45, an inhabitant of the city of Gloucester, came under my care at the county infirmary September the first 1763; having been ill one year of an irregular Intermitting Fever, attended with a most violent pain in her head, which often deprived her of her senses. She had used many endeavours for relief, and particularly taken medicines which are distributed by some good ladies in that city as never-failing specifics in agues, but without any other effect than increasing the pain of her head.

A blister was applied to the neck on the evening she came into the hospital, and a purge given her the next day. This method, together with pediluvia used at night, removed the pain from her head; after which the following powder

powder taken every fourth hour put a stop to the fever.

Snakeroot 15 grains
Bark two scruples.

Complaining of sickness at stomach I ordered her three grains of calomel made up in a bolus with *confectio cardiaca*, to be taken for three nights going to bed; and directed a purge to be given the day after the third bolus was administered.

After this purge she repeated the above powder for a few days, and was discharged September the twenty-ninth, being compleatly cured. And she had afterwards no return of her complaints.

C A S E III.

Thomas Gough of Maifemore near Gloucester, aged twenty-two, having
been

been ill four months with an Intermitting Fever, was admitted a patient at the Gloucester infirmary February the 7th, 1765.

After a vomit with ten grains of ipecacoanha I gave him the pulvis febrifugus, No. 1. and ordered a spermaceti lohoc, on account of a cough he was troubled with. The ague was immediately stopped, and he was discharged cured February the twenty-eighth.

C A S E IV.

Henry Freeman of Gloucester, aged thirty-three, ill four months with an Intermitting Fever, was admitted a patient at the infirmary February the fourteenth 1765.

After opening the body with a solutive bolus I put him upon the febrifuge

fuge electuary; No. 2. His ague was immediately stopped, and he was dismissed from the hospital February the twenty-eight. But lest his ague should return his name was kept upon the books for a month longer, when it appearing that he had no relapse of his disorder he was then finally discharged, March the 28th.

C A S E V.

John Leech of Hempstead near Gloucester, aged thirty-four, ill two months with an ague was admitted at the infirmary December the sixteenth 1766.

I ordered a scruple of rhubarb to be given him the evening he was received into the house; and put him upon the febrifuge electuary, No. 2, the next day. This effectually putting a stop to the ague, I exchanged it for a plain peruvian electuary No. 3, and he
was

was discharged cured January the eighth 1767.

C A S E VI.

William Pearce of Stroud, aged sixteen, ill six months with a Quartan Ague, was admitted at the Infirmary February the twenty-eighth 1769.

The day after his admission I gave him the full dose of the febrifuge powder every fourth hour, without any preparation. This soon put a stop to the Fever; after which I ordered him the medicine only three times a day, and he was discharged cured March the twenty-third.

Sanctorius supposes that the principal cause of an Intermitting Fever proceeds from the perspirable matter being retained, at the same time that the fibrillæ of the capillary vessels are relaxed.

D

If

If this is the case, no medicine appears more adapted to remove both these impediments to health than the stimulating quality of the snakeroot joined to the astringent virtue of the bark in this febrifuge powder.

Whytt's opinion is, that an ague proceeds, like the epilepsy and other convulsive disorders, from some species of irritation acting upon the stomach and intestines; or some other part of the body. This hypothesis is supported by Vanfweiten, in his commentary upon the seven hundred and fifty seventh of Boerhaave's aphorisms, where he gives us two cases of Intermitting Fevers affecting a particular part only, both of which were cured by the bark given between the fits.

He was consulted for a nobleman who was affected with a pain in that part of the head where a branch of the fifth pair of nerves passes out of the skull
through

through a foramen in the os frontis. This pain extended itself over one half of the head, and having continued to afflict the patient violently for eight hours, gradually decreased, and at last perfectly vanished.

Epithems and blisters were applied to the head, epispastics to the feet, and purges, &c. administered without affording any relief; but upon exhibiting the peruvian bark this most troublesome disorder immediately ceased.

Another patient with a violent intermitting pain, arising in the same part, and attended with nearly the same symptoms, fell under the care of the same ingenious and attentive physician; who not being able to remove it with cupping glasses, blisters, purges, &c. used the bark, and with the same fortunate event.

In the last case he felt the pulse of the artery at the wrist, and also where it runs down the forehead about the larger canthus of the eye, and, by comparing them together, he observed that in the pulse at the wrist no alteration happened during the paroxysm, but that at the canthus it beat much swifter, and stronger than it naturally used to do. Hence he concludes, that in these cases the intermitting disorder affected the circulation of the blood in that particular part only where the stimulus acted, but that the whole mass of blood was not influenced by it.

By the above instances we see that an Intermitting Fever may arise in a particular part of the body, without disturbing the œconomy of the whole animal machine. But it is remarkable, that whether it becomes a general, or remains a partial disease, the method of cure to be pursued is the same.

In

INTERMITTING FEVERS. 29

In my essay upon the effects of camphire and calomel in Continual Fevers, I have attempted to shew the great connection that subsists between the stomach, and even the most distant parts of the body. And this will be still farther confirmed if we suppose that the cure of Intermitting Fevers, as I have just now mentioned, begins in the stomach, and that thence the more distant parts by sympathy partake of the benefit.

Whytt says that strengthening the stomach and intestines is the best method for removing the epilepsy, and nervous disorders in general. And Fuller, in his pharmacopæia extemporanea, informs us, that the very powder I recommend as so effectual in the Ague, is when given in an electuary,* a most certain remedy for the epilepsy.

Sydenham,

* Elect. Peruv. Epilepticum.

R. Cort. Peruv. pulv. ℥vi.

Rad Serp. Virgin. pulv. ℥ii. cum f. q. Syrup.
flor. Pæon. vel Pæon. comp. fiat Elect. molle.

Sydenham, whose candor and generosity induced him to point out his errors, as well as to mention the successful parts of his practice, acknowledges that he was mistaken in his administration of bark immediately before the fit of an Intermitting Fever; but that he found it the most effectual medicine of any, if given directly after the fit was ended, in such a manner as to convey into the patient as much bark as possible before the next return of the Ague was expected. By these means the Fever was stopped, but he observed that a repetition of the bark was necessary for a con-

Antiepilepticum præstantissimum, et certissimum pharmacum existit, uti experientia me edocuit.

Si (post debitas evacuationes) adultis ʒi. et aliis minor dosi mane et vespere per 3 vel 4 menses exhibantur: et postea per triduum, vel quatri-duum ante novilunium, et plenilunium morbos Epilepticos, et Hystericos penitus eradicat. Pharmacop. extemporan. Page 64.

considerable time afterwards, otherwise the patient would frequently suffer a relapse.*---He likewise mentions giving a scruple of snakeroot† frequently with success in Tertian Agues. But neither he, nor any author that I am acquainted with mentions the union of bark and snakeroot in the manner I use it. Fuller does not recommend his electuary in the Ague, neither does a drachm of it, which is his highest dose, contain so much as one third of the highest dose of my febrifuge powder.

* Sydenhami opera in Epistola Responsorio ad Robertum Brady M. D. P. 265, 266, 267.

† Loco citato, P. 274. Sydenham gave this powder in three ounces of white wine two hours before the Ague fit was expected, and then ordered his patient to be covered up in bed, and to sweat for three or four hours.

SECTION IV.

Of the use of Calomel in Intermitting Fevers.

WHEN the first passages appeared loaded with impurities I sometimes advised a vomit, but more generally had recourse to a mercurial purge. And indeed I found this last method so efficacious, so safe, and so much more pleasant than a vomit, that for some years past I have rarely given the febrifuge powder without using this method of preparation.

Hoffman so strongly recommends mercurius dulcis in Intermitting Fevers, that he mentions it as striking at the
very

INTERMITTING FEVERS. 33

very root of them.* And in his treatise upon a Quartan he gives us the two following cases of people cured by it.

A young student, who indulged himself in his bottle and late hours, going a journey in a rainy autumn contracted a Tertian Ague. In the hot fits he endeavoured to quench his thirst by drinking large quantities of acidulated weak liquors, and juleps. His Tertian changed to a Quartan with violent pains in all his limbs, and a sort of rigor in his head and feet. He was costive, his urine was hot, and came away only in drops. This Fever having long eluded the efforts of physicians, and the effects of medicines, at last the following powder was given.

R. Corall.

Sal Abfinth.

E

Mercur

* Hoffmannus de bile medicina et veneno corporis. § 29.

Mercur dulcis ana zi.
O lei Caryophyl gtt. vi.
Laudan gr. iv. m.

Of this powder the patient took so much twice in a day, that in the space of three days the whole was consumed; the consequence of which was that a salivation arose, and the Fever* departed. It is added however, that the salivation continued very violent for fourteen days, and that the patient narrowly escaped with life.

A strong, plethoric, sedentary man, who eat heartily, and was subject to the piles,

* That a salivation is not in general a cure for an ague we may be assured, when we are told by Vanswieten, in his Comment upon the 757th of Boerhaave's Aphorisms, that a Quartan has continued its course, exactly keeping its returns, through the middle of a salivation; and that he has known a vernal Tertian arise in the midst of one.

piles, and hypochondriacal disorders, in the month of October, without any preceding external cause, contracted a Quartan Ague. His physician ordered him a bitter elixir with spirit of sal ammoniac, to be taken in an infusion of common tea, and directed him to drink plentifully of it before the approach of the fit. The patient growing worse under this treatment, the Doctor gave him the bark very liberally both in, and out of the paroxysm.

Another physician being called in, upon a number of ill symptoms appearing, and the Fever seeming to be continual, he bled the patient, and by solutive aperient apozems, and other means, in the space of a month, brought the Fever to a more mild and regular state. He then prescribed a powder composed of steel-filings, bark, mercurius dulcis, &c. This being divided, and taken at twelve doses the Fever insensibly expired, and by the time the

last dose was taken the patient was restored to perfect health.*

Willis likewise gives us one case where mercury removed a Quartan Fever. He says that in the autumn of 1681 Quartan Fevers were so very general, that every body had it in their power to make what observations they pleased upon them; at which time a young

* Hoffmannus de Febre quartana enarrationes morborum. Observ. iii. iv.

Hoffman kept his patients ill with Tertian, or Quartan Fevers a long time upon aperient apozems, and gave solutive medicines before he ventured to administer the cortex, judging the use of a specific medicine dangerous before the noxious humors are corrected, and evacuated, which by his method could not well take up less time than a month. Boerhaave seems to have adopted the same plan: and Sydenham is very apprehensive lest the bark given too soon might stop the despumation of the Fever.

young lady desired him to give her a speedy cure, and she was willing to submit to any method he should propose for her obtaining it.

The Doctor having observed that the common methods of practice were ineffectual, told her that if she would suffer herself to be put into a spitting for a few days by means of a mineral medicine, he believed he could remove her disorder in a short time. The patient readily consenting to his proposal, he gave her a mild, and entirely safe medicine, by which a light spitting was raised, and finished in the space of twelve days.

From the time the salivation began the febrile paroxysms ceased; but about the times of their usual approach she suffered great perturbation all over her body, with oppression of the heart, and a fear of fainting. However after
the

the spitting ceased she appeared perfectly well.

After the space of two months, perceiving some slight accessions of the Fever, she took an emetic, and repeated it two or three times, and was then entirely cured without any relapse.*

Throughout the practice of these great men in giving mercury in Intermitting Fevers, the chief point in view seems to have been an attenuation of the viscid humours, wheresoever seated.

* Willis sometimes used the same tedious preparation as Hoffman, and Boerhaave recommend, but his common method of practice was to give an emetic, and sometimes a solutive medicine before the fit. After which epithems were applied to the wrists, and the bark given in some generous wine, the patients being ordered into bed in order to promote, and keep up a diaphoresis. Willis de Febribus, Cap. vi. P. 69. 70.

ed. And for this purpose their mercurial medicines are directed to be taken in sufficient quantities to raise a salivation. But I no where find them administering a mercurial purge to cleanse the first passages, and prepare the stomach for the reception of a specific medicine.

Langrish, it must be confessed, recommends this practice, and says that in obstinate Agues, or Intermitting Fevers he has experienced greater advantages from rhubarb and calomel in small doses than from any other medicine he ever tried.* He laments however that the cortex is not self sufficient to cure many inveterate Agues, and says, “there
 “seems to be wanting, in obstinate and
 “confirmed Intermittents, something
 “that is more strongly endued with a
 “property of attenuating, and dissolving
 “the

* Langrish's Theory and Practice of Physic.
 Sect. 411.

“ the viscid cohesions of the blood
“ and lymph.”† This deficiency, whether arising from the cause assign’d by Langrish, or from any other, I apprehend is supplied by joining snakeroot to the bark in the febrifuge powder.

My practice in such cases is to give a calomel purge as soon as possible after the paroxysm is ended;* and to begin upon the febrifuge powder after the purgative has done its duty. By these means I gain an opportunity to throw down two or three doses of the powder before the return of the Ague is expected; and have rarely been disappointed in my expectations of putting an entire stop to it. This will be best illustrated by the following examples.

CASE

† Ibid. § 413.

* When purges were given by Willis and others in Intermitting Fevers they usually ordered them to be taken before the fit comes on.

C A S E VII.

Winifred Heyley, aged thirty, ill three weeks with a Quotidian Intermitting Fever, was received into the Gloucester infirmary May the 4th, 1769.

The intermissions of this patients disorder were very short, and imperfect; she had a constant purging upon her, and her strength was greatly reduced.

After the operation of an emetic I order'd her the aromatic electuary, No. 4, and a saline mixture to be taken twice a day, with a view to correct the Fever, and restrain the diarrhœa; and added a lohoc to be taken occasionally on account of a cough.

Having in a few days gained a clear intermission, although but of short duration, I ordered the astringent mixture, No. 5, to be given after every
F stool,

stool, in order to check the purging, which still continued, and directed the full dose of a drachm of the febrifuge powder to be given upon the first opportunity that offered between the fits, which was done; and she afterwards got down two doses in every interval.

The Ague being thus stopped, and the diarrhœa continuing, but not so violent, I gave her five grains of calomel and one of opium at night going to bed, and a scruple of rhubarb the next morning. This method of removing a diarrhœa I had before experienced, and it proved equally effectual in the present case.*

The great evacuation she had suffered, together with the fatigue of her Ague, almost always upon her, occasioned

* When a diarrhœa is stopped by the administration of calomel we may suppose that the

sioned a fluor albus. Of this being cured in the space of a fortnight, and having recovered her strength, she was discharged June the eighth, without having had any return of her Ague.

C A S E VIII.

Benjamin Sullis, of Ripple in Worcester-shire, aged 26, ill six months of a regular Intermitting Fever, was admitted at the infirmary December the thirteenth 1764.

Half a scruple of ipecacoanha powdered was taken in a draught before the Ague fit came on, and a bolus containing ten grains of rhubarb, and five of calomel was given in the evening, after the fit was ended.

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After

acrimony was lodged in viscidities adhering to the first passages which were removed by the virtue of the medicine.

After the purgative operation of this medicine ceased he began upon the pulvis febrifugus, to which the Ague immediately gave way, and he was discharged December the 27th.

C A S E IX.

John Sifam of Churcham, aged sixteen, ill six months of an Intermitting Fever, was admitted at the infirmary July the third 1766.

Ten grains of calomel* being given him at night, and purged off the next morning, he began upon the pulvis febrifugus, which stopped his Ague, and he had no return. Being inclined to be costive a solutive bolus was given him occasionally, and July the seventeenth

* This is not an unusual dose, neither is it generally thought a large one; but I have found five grains sufficient in most cases.

INTERMITTING FEVERS. 45

teenth he was made an out-patient, for no other reason but to prove whether his Ague was well cured. July the 31st he returned to the hospital, having had no relapse, and was then discharged.

C A S E X.

Giles Millard of Hartpury, aged 24, ill six months with a Quartan Fever, was admitted at the infirmary February the ninth 1769.

Five grains of calomel being administered at night, and a solutive draught the next day, I ordered a drachm of the pulvis febrifugus to be taken in the evening at bed time, after his physic had done working, and that the day following he should repeat it every fourth hour.

This raising his pulse too much I had eight ounces of blood taken away, and
gave

gave the powders only three times in a day. No Ague returning after he first began upon the powders, I soon dropped the snakeroot, but the bark was continued to the time of his being discharged cured Feb. the twenty-third.

C A S E XI.

Samuel Boone of Badgeworth, aged 25, ill six months with a Quartan Ague, was admitted at the infirmary March the ninth 1769.

Five grains of calomel with the solutive draught, and the pulvis febrifugus being given as usual immediately cured the Ague, and the patient was discharged April the fifteenth,

C A S E XII.

Enoc Summers of Cam, aged thirty, ill nine months of an Intermitting Fever,

ver, was admitted at the infirmary June the fourth 1767.

He began upon a saline mixture immediately upon his admission; and I ordered him five grains of calomel to be given on the evening following the first Ague fit he should have in the hospital, and that he should take the solutive draught the day following: after which he began upon the bark electuary, No. 3, in the absence of the Fever.

June the twenty-fifth, the ague still continuing, he took a scruple of rhubarb; and returned to the saline mixture, to which a lohoc was added on account of a cough, and the bark omitted. The cough being eased by the lohoc, it was in a few days exchanged for an electuary of millepedes, No. 6.

The obstructions, which had been sufficiently apparent in this case from
the

the fallow complexion, as well as other symptoms, being as I apprehended removed by the above treatment, I speedily put a stop to the Ague by the febrifuge electuary, No. 2, and the patient was discharged cured July the sixteenth.

C A S E XIII.

Ann Powel of Wheatenhurst, aged 49, ill nine months of an Intermitting Fever, was received at the infirmary July the sixteenth 1767.

On the evening after her first fit in the hospital she took three grains of calomel, and purged it off the next day. The febrifuge electuary, given as usual after the purge, stopped the Ague, but the diarrhœa continuing obliged me to order astringent medicines, which having obtained the desired effect, she was discharged cured, August the twentieth.

C A S E

C A S E XIV.

Mary Murcifer, of Standish, aged twenty-five, ill one year with an Intermitting Fever, was admitted September the eighth 1763. Besides her Ague she had for some time had an obstruction of the menses.

A dose of calomel being given and purged off by way of preparation, the pulvis febrifugus was ordered, in the quantity of half a drachm, every fourth hour in order to stop the Ague fit, which it effected. And afterwards a bark electuary with sal martis was given, and continued for some time, with a view to both complaints.

Lastly, the electuary being left off, she was directed to take lac ammoniac ꝑi tinct melampodii ꝑi twice a day, and the pilulæ martiales No. 7, at night. By these means, having obtained a com-
G pleat

pleat cure of both disorders, she was discharged November the third.

CASE XV.

James Bradley, of Gloucester, aged fifty-three, ill thirteen months of an Ague,* was admitted November the nineteenth 1767.

After taking a calomel bolus, and the solutive draught the next day, he began upon the febrifuge electuary. The Ague being stopped, and the patient costive, I ordered, November the twenty-sixth, that he should take a solutive draught, and continue the electuary, omitting the snakeroot in its composition.

December

* In this, and other cases where I have not mentioned what species of Ague the patients laboured under, it is to be understood that they were Regular Intermitting Fevers, and either Tertians, or Quartans.

December the first he took five grains of calomel, with the solutive draught, No. 8, the next day. These medicines were repeated December the third. And as he had been so long ill, the bark electuary was continued to the time of his being discharged cured December the seventeenth.

To these hospital cases it will be sufficient to add one very remarkable instance more, which happened to me in private practice.

C A S E XVI.

April the fifth 1769 I was sent for to Mr. Daniel a master carpenter at Sandhurst near Gloucester. His complaint was a violent periodical pain in his head, attended with a great tightness upon his breast, for which he had been bled twice, but without receiving any relief. As these alarming symptoms re-

G 2

turned

turned every other day, I judged his disorder to be an uncommon Tertian Ague, and accordingly treated it as follows.

R. Calomel gr. v.

Succ glycyrrhizæ q. f. f. pil fument
hac nocte hora fomni.

A solutive draught was also ordered to be taken the next morning; and an anodyne to be given in the evening after the operation of the purge.*

On the morning of April the seventh I made my patient a second visit, when I found that the paroxysm had affected him slightly, but that he was then in a
proper

* At the infirmary I gave the apothecary a general direction to administer an anodyne whenever the calomel happened to purge rather too much, but in private practice I commonly order the composing draught in the evening after the operation of the physic at all events.

proper state to begin upon the febrifuge powder. Of this powder I gave him a drachm about the middle of the day, and directed it to be repeated the following night at bed time, and to be taken afterwards three times every day in the absence of the Fever.

The consequence of the above treatment was, that although the pain in the head, and difficulty of breathing did return after the operation of the calomel; yet the violence of these symptoms was greatly mitigated: and after the patient began upon the powders he never found any thing more of them.

It was surprizing to observe how suddenly he recovered his health, and strength, insomuch that notwithstanding his having been reduced to a very weak state by the violence of his fits; yet upon April the ninth, when I made him my last visit, he appeared to want neither physic, nor physician. However,

ever, for security I prevailed with him to continue his powders, for a few days longer, twice a day only.

As this powder consists of only two ingredients, its efficacy must be allowed to proceed from the peculiar virtue of one of them, or from the united force of both.

The most powerful quality of the bark is generally thought to be its astringency. But Sydenham says it does not operate in the cure of an Ague by that quality. If it did other astringents would do the same, and he says he has tried the strongest ineffectually. However if we suppose it to operate by its astringency, or by any other specific virtue, three drachms of it is too small a quantity to obtain the desired effect, since an ounce given alone will often prove insufficient to stop an Ague, or prevent a relapse.

The

The snakeroot promises much fairer to be the principal ingredient in this composition. Sydenham tells us that he gave a scruple of it before the fit with success. But whether three scruples of snakeroot given alone at three doses between the fits would be equally effectual as when joined to two drachms of the bark, according to the proportion of the febrifuge powder, I have never experienced.

Although I had the happiness to experience such remarkable success attending my endeavours in the cases above recited, yet others convinced me that I must not always expect the same fortunate events.

A poor woman who was much weakened by giving suck, and at the same time obliged to be almost perpetually washing for her children, was under my care as an out-patient at the Gloucester infirmary almost a twelve-month

month without being well cured of an Ague.

The same observation I made upon an honest industrious poor man, who, in order to support a wife, and two small children, was constantly exposing himself to the severity of all kinds of weather in hedging, ditching, mowing, and other kinds of country business. And in general I have observed, that in-patients commonly receive a better cure of their Intermitting Fevers in a few weeks, than out-patients do in the same number of months.

The reasons for this I apprehend to be first, my not being able to trust these patients often with calomel.

Secondly, their imprudence, or the the necessity they are under of exposing themselves to the severity of the weather. And

Thirdly,

Thirdly, the coarse improper diet they use.

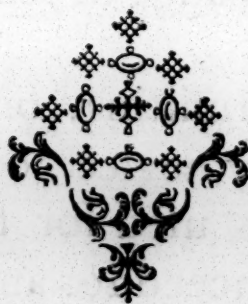
However it is no small satisfaction to me to find, that by putting in practice the means above recommended, and taking proper care to avoid whatever may afford a fresh cause of the disease, the most favourable issue may, with the greatest probability, be expected in a disorder which is frequently very obstinate, and has sometimes been declared utterly incapable of cure by any thing but a change of season.

When Intermitting, or Continual Fevers, either by neglect, or the inefficacy of the means used for their removal, happen to proceed for any considerable length of time they frequently give rise to a variety of the most dreadful chronical diseases, as consumption, atrophy, cachexy, &c. owing chiefly to obstructions formed in the mesenteric, pancreatic, and other glands.

H

But

But the most usual terminations of such cases are, Dropsies, and indurations of the liver, happy therefore shall we be if by the means above mentioned, or any other, we can escape such disorders, which have always been found obstinate, and too frequently fatal.



A N
E S S A Y
U P O N T H E
D R O P S Y.

S E C T I O N I.

*Of the Causes, and general Methods of
Cure in Dropsies.*

W H E N water is collected, and
has a preternatural stagnation,
in any part of the body, the disorder
is usually denominated a Dropsy. The
cause of this is always some obstruction
in the circulation, by means of which
H 2 the

the most watery parts of the blood, being discharged from the finest series of arteries, cannot be taken up by the corresponding absorbent veins; whence ensues a Dropsy of that particular part where the water happens to be left. And from this circumstance the various kinds of Dropsies are distinguished, and receive their several appellations, as a Dropsy of the head, chest, testicle, &c.*

Dropsies

* The present treatise not being intended as a dissertation upon the Dropsy in all its branches, but principally designed to shew the operation of calomel, I shall take notice of such species of Dropsy only as I have experienced to have received most signal relief from this medicine. But as it will be made appear that there is no part of the human body impervious to the penetration of mercurial preparations, the success of them in any one species of Dropsy gives room to hope for equal benefit from them in the others, excepting the hydrocephalus, where a salutary evacuation of the water, by means of any internal medicine, very rarely, if ever, takes place.

Dropsies in general, and especially the anasarca, are frequently the consequences of Fevers in all parts of the world. Bontius says that the Dropsy is the most familiar disease of any to the East-Indies. And the same observations have been made by some of our own countrymen, who have visited those parts in a medical capacity. At the same time however that we are told the Dropsy is more frequent in the East-Indies than in Europe, we are informed that it is most easily cured there.

In hot countries a Dropsy is usually preceded by an high Fever, attended with very violent symptoms, and is generally the consequence of an obstruction in the liver. Diseases of the liver are not so frequent in cold climates; yet we of this island are not without many instances where Intermitting Fevers long continued have produced indurations of the viscera, and especially of the liver, the consequences

quences of which have been sometimes a suppuration of that viscus, but more frequently a Dropsy.

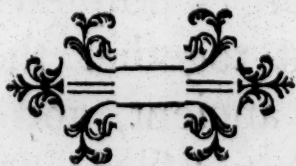
As long as Dropsies have been known so long almost has it been evident, that the only effectual method of cure is by draining off the load of water with which it is encumbered. This has been attempted by various ways, internally, and externally.

Internally purges, diuretic, and diaphoretic medicines have been given with a view to encourage, and promote an evacuation of the water by the natural discharges of stool, urine, or sweat. ---Externally the latter has been encouraged by the use of hot baths, steams,* hot stoves, and warm dry applications,

* In two instances I have experienced considerable assistance from a sweating chair, in the removal of very obstinate Dropsies. But in ge-

plications, such as salt, sand, &c. commonly called dry baths. Whilst openings made upon the parts immediately affected have been intended as artificial drains to the stagnating fluid, under the several denominations of tapping, setons, issues, and blisters.

neral, the constitutions of hydropic patients have appeared to me too much shattered to endure so violent a shock.



SECTION II.

Of the Use of Calomel in Dropsies.

THOSE who would wish to see a clear, and concise account of the Dropsy, and its different species, may be satisfied in their enquiry by consulting an essay upon that subject written some years since by Donald Monro, M. D. physician to his Majesty's army, and St. George's hospital; in which he has brought together the practice of most of the ancient, and modern physicians in that disorder. Amongst the diuretic medicines he has not omitted quicksilver when killed with honey, or balsam of sulphur. As a proof of the first, he brings some cases where the
pilulæ

pilulæ mercuriales laxantes of the Edinburgh dispensatory have produced very happy effects: and mentions some instances also of the efficacy of mercury subdued by balsam of sulphur.

He says that his father ordered two or three doses of *mercurius dulcis* to a man, who had an universal anasarca, and ascites, which caused such a copious discharge of urine as to remove his complaints entirely in one night: and that in January 1762 he ordered three grains of calomel morning and evening to ----- Carter, a soldier in the eleventh regiment of foot, who laboured under an anasarca, which had come after a flux, and had yielded nothing to other remedies. This medicine proved strongly diuretic, and removed his dropfical complaints.*

I

Besides

* *Monro on the Dropsy*, p. 72.

Besides the two cases above mentioned, I do not remember that Dr. Monro gives us any other to shew the good effects of calomel in this disorder. It has indeed been sometimes mentioned by other authors; but as its use is by no means general in practice, it will not I apprehend be thought superfluous to add the following cases, which have fallen under my observation, in confirmation of the benefits received from so excellent a medicine.

C A S E I.

William Stratford of Cirencester, aged seventy-two, was seized in the month of August 1759 with a Regular Intermitting Fever, which continued to the December following; and then became irregular. He was also afflicted with an anasarca to such a degree, that his neck, abdomen, scrotum, legs, and all parts of his body were greatly tumified, except

except his head, and arms. His urine came away involuntarily, and the parts from the pulvis downwards were cold as clay, and insensible to the touch. His memory was impaired at all times, but in the febrile paroxysms (which lasted eleven hours) it was entirely lost. In these deplorable circumstances Dr. Lewis of Oxford, and myself, who were then upon a consultation for a young lady in the town, were desired to give our assistance, and wrote the following prescription.

R. Elect e scordio ʒi.

Calomel optimè lævigat gr. v. fiat bolus, sumendus ad duas vices hora somni. Et mane proximo post secundum bolum assumptumumat haustum sequentem.

R. Infus senæ common ʒii.

Tinct rhæi spirituos ʒi. m.

R. Sapon dur ʒifs.
 Gum ammon ʒi.
 Sal martis ʒfs.
 Spec aromatic.
 Rad scillæ fīccat ana gr. xxiv.
 Balsam peruv q. f. fiant pilulæ 48
quarum fumat iv bis die, diebus a
catharsi liberis superbibendo haustum
infusi cinerum genistæ.

R. Emplastr e sapon.
 E galbano ana p. æ. q. f. fiat em-
plastrum abdomini applicandum.

The plaister was immediately applied to one side of the abdomen, where was to be felt such an hard internal tumour as is not unfrequent with patients who have laboured for any considerable time under Intermitting Fevers, and which the common people call an Ague-cake, A bolus was also given the same evening it was prescribed.

The

The effects were, that he made water insensibly almost the whole night, and in so large a quantity, that it passed through a sack-bag doubled, a coat doubled, a blanket, the bed, &c. to the floor, where lay a large quantity of it.

The next morning he found himself much relieved, but made no considerable quantity of water that day. At night he took the second bolus, by which he discharged water plentifully, but not in so large quantities as on the first night. The following morning he took the opening draught, according to directions, which gave him three moderate purging stools, but not watery, by which he was greatly relieved, and presently retained his senses.

Things having gone on happily thus far, the pills were begun upon; but in less time than a week the patient had a return of his Ague. Neither Dr. Lewis
nor

nor myself being then at Cirencester, he applied to his apothecary, who gave him a bark-electuary, which brought on all his former anasarcaous swellings, but his memory remained perfect. Upon this occasion the apothecary administered the medicines before prescribed, and obtained the former success.

The hydropic symptoms being a second time removed, the Ague again returned in an irregular manner, and was put a stop to by a medicine that the patient procured from a friend, after which he suffered no relapse. I saw this man in April 1761, when he was perfectly well, and had been able constantly to attend his duty at a turnpike, without having had any return of his Dropsy, or Ague; notwithstanding his being oftentimes necessarily exposed to the inclemency of the weather by the nature of his employment.

CASE

C A S E II.

Edward Avery of Gloucester, aged fifteen, was admitted a patient at the Gloucester infirmary September the first, 1763, having been anasarcaous from an Ague for three weeks; and when admitted his abdomen appeared remarkably large, and tumid.

I directed a saline mixture for him with diuretic salt, which was continued; but with no signal benefit, to September the fifteenth, at which time the following was ordered.

R. Confect cardiac ʒi.

Calomel gr. ii. fiat bolus sumendus hac nocte, et cras mane sumat haustum sequentem.

R. Infus lenitiv No. 9.

Tinct rhubarb ana ʒi. m.

These

These medicines were repeated September the eighteenth, after which a scruple of the febrifuge powder was given three times a day, and September the twenty-ninth he was discharged cured of both Ague, and Dropsy.

C A S E I I I .

Elizabeth Longford of Cirencester, aged twenty-eight, was admitted a patient at the Gloucester infirmary April the fourth, 1766.

In September 1765, having had the Ague for some time, and being then five months gone with child, her legs began to swell, and she said her face also, so that she was at that time perfectly anasarcaous. She was in hopes that these complaints would go off after her delivery; but was disappointed. Her child appeared to be full of water, and lived but two days. And the Ague
and

and swellings continued until she was admitted at the infirmary, when her abdomen appeared to contain no inconsiderable quantity of water, and she was anasarcaous from head to foot. Besides which she was exceedingly weakened by a purging, which had constantly attended her from her first seizure.

Having ineffectually attempted to stop the purging by *mistura cardiac* No. 10, *mistura astringens* No. 5, and other absorbents, and anodynes, until April the nineteenth, I then ordered the following bolus.

R. Calomel gr. i.
 Opii gr. i.
 Pulv. contrayerv. comp. ʒi.
 Syrup. e cort. aurantior. q. f. f.
 bolus.

This bolus was to be taken at bedtime, and four spoonful of the cordial
 K mixture

mixture No. 10. were directed to be given the next morning, and repeated every sixth hour, with the addition of a sufficient quantity of laudanum in each dose to restrain the purging. This succeeded, and the patient, who could not get out of bed, and was prodigiously swoln in all parts, began to get a little ground. Finding this check given to the violence of her symptoms, when little or no hopes appeared, April the twenty-first I ordered a repetition of the bolus every night, except a purging should return.*

From this time she made great quantities of urine, by which her swellings subsided considerably, and she gained strength daily. But her breath being much affected I ordered two of the
asthmatic

* This I did lest the opiate might not be sufficient to prevent the calomel from purging when given constantly, but experience shew'd me there was no occasion for that caution.

asthmatic pills No. 11, to be taken every morning, and the bolus before prescribed to be continued at night. Whilst she was going on successfully in this course an itch, which had not before been observed, made its appearance, and rendered it necessary to remove her out of the hospital to private lodgings, wherefore she was made an out-patient May the first.

Whilst she was out of the house I ordered sulphur internally and externally, in the usual forms for curing the itch, neglecting for a time the Ague, and depending upon what she had already taken for farther relieving the hydropic symptoms.

Upon her return to the hospital June the fifth, it appeared that the swellings were totally subsided. A cough, which had attended her from her first seizure, yet continued, but was much mended, and would now permit her to lie down

in her bed, which was not the case before she was made an out-patient. The Ague, which had been a Quartan, was now irregular, and often shook her twice in a day.

In this state I directed two of the asthmatic pills to be taken twice a day, and in the intervals of the Ague fits gave the elect. febrifug. No. 2. The Ague being stopped, I directed the elect. peruv. No. 3, and lohoc No. 12, of each equal parts, to be given regularly for some time.

By these means, at the end of three weeks from her re-admission, both disorders of Ague, and Dropsy were subdued. Her cough was yet troublesome, and though able to walk about, she remained very weak. Regard being had to these complaints, proper medicines were directed, and she was continued in the hospital to July the 24th, when she was discharged perfectly cured.

CASE

C A S E IV.

Betty Lawrence of Stawel, aged twenty-six, ill six weeks with an ascites, was admitted a patient at the Gloucester infirmary the twelfth of June, 1766. The history she gave of her disorder was as follows.

Somewhat more than a year preceding the first symptoms of the Dropsy she had an eruption of large pustules over all parts of her body, and an inflammation of her eyes. These complaints were removed in about eight weeks, but she continued very weak, and an eruption of small pustules yet made its appearance now and then upon her arms and face. At Michaelmas she had recovered her strength sufficiently to go out to service, at Mrs. Masters at the abby in Cirencester, and continued well till Christmas, at which time she had a pain in her right side, which
by

by bleeding, and taking a purge or two was removed.

About Easter the pain returned in her right side, and continued for a month, when she began to swell in the abdomen, and her skin had a yellow tinge. The medicines she took from her apothecary not succeeding, but on the contrary the tumor increasing, she was tapped about a fortnight before she came to the hospital.

At the time of her admission she was evidently filling again, and made not above four ounces of water in a whole day and night, and that so highly inflamed as to be almost of a scarlet colour. In this state I ordered her a pill containing a grain of calomel to be taken every night, and the following powder to be taken thrice a day.

R. Pulv. contray. comp. ʒi.
Nitr. gr. x. m. f. pulvis.

The

The quantity of urine she made soon increased, and the colour of her water became lighter in a few days. As she had been desired to measure herself every day, she found in a fortnight that her swelling lessened, but a spitting coming on, and pain in the head, she was obliged to desist from the use of calomel, and took jul. vol. cum nitro No. 14.

The pain removed from her head, but she made much less water than when under the former method, wherefore I continued the former powders without the calomel, and gave her a purge or two to carry off the incipient salivation.

The abdomen gradually lessened, and a cough, which attended her at, and long before her being tapped, and which increased after that operation,*
was

* The reason of this we may collect very fully from the observation made by Bontius upon the

was entirely removed as the waters went off; so that in the space of a month she was quite free from her ascites, and cough.

As she was yet languid, and had not had her menses regular from the beginning of her first illness, I chose to keep her a little longer in the house; and ordered her the pil. martial. No. 7, by which she continued gaining strength, and was discharged compleatly cured August the seventh.

CASE

oriental Dropsies, where the liver is principally affected. A dry cough, he says, and difficulty of breathing, accompany this disease, because the liver by its insertion, and increased weight, draws the septum transversum backwards, and thence the thorax, and lungs are affected; whence these troublesome complaints are produced.—Bontius de medicina indorum p. 255.

CASE V.

James Sayfel of Flaxley, aged thirty-five, was admitted a patient at the Gloucester infirmary January the fifteenth, 1767.

This man's employment had been about a forge, or furnace where the ore is reduced into the metallic form of iron. The intense heat of the furnace must necessarily increase that of his body to a great degree above what is natural; and his exposure of himself in that state to the open air, in all kinds of weather, together with a too free use of cold water, produced an ague, three months or upwards before he applied to the hospital. His Ague was at first a Quartan. It continued in that shape for a fortnight, or three weeks, then became a Tertian, and lastly a Quotidian. Having a wife, and four small children to maintain by the fruits of his
L , own

own labour only, the dearnefs of provisions, which at that time prevailed, would not permit him to drink any other liquor than water; and as he continued working at the furnace, notwithstanding his Ague, the heat of his Fever, as well as that of the furnace, occasioned his drinking large quantities.

In this manner he continued his work at the furnace, for nine or ten weeks with the Ague and Fever upon him, at which time, hydropic fymptoms coming on, he quitted his ufual employment, and applied himfelf to threshing and fuch other kinds of work, where he might not be fo much expofed to the viciffitudes of heat and cold. In this very induftrious manner, working as much as his ftrength would allow of, he fpent five weeks more; when his Ague coming every day, and being full of water in the abdomen, as well as all other parts of his body, he was brought to the infirmary.

Though

Though he was very full of water, yet having a considerable degree of strength, I ordered three grains of calomel to be taken three nights successively, and that a dose of infusum lenitivum No. 9, should be taken upon the morning following the last dose. After this he took the asthmatic pills No. 11, with the saline mixture No. 17.

The Dropsy beginning to abate, and the intermissions of the Ague fits being more distinct than at his admission, he was directed to take the bark electuary No. 3, every second hour, with equal parts of lohoc No. 12, on account of a cough. After the Ague was stopped, I continued the bark and lohoc a drachm of each three times a day, and afterwards added the asthmatic pills night and morning.

The water not passing off by urine so well as I expected, I added a grain of calomel to the pills, and continued the

other medicines. The water being thus all evacuated, and the Ague and cough removed, I gave him a saline mixture, and the bolus solutivus No. 18, occasionally, and finally February the twenty-six he was discharged cured of all his complaints.

C A S E VI.

Mary Clarke of Leonard-Stanley, aged twenty-two, was admitted a patient at the Gloucester infirmary March the twelfth 1767, having been ill five months with a Dropsy, by which her strength was very much impaired.

The medicines first ordered her were a saline mixture, and bark powdered, and directions given to add five drops of the thebaic tincture occasionally, on account of a purging she complained of. This method was pursued to March the twenty-seventh without any ground being

being gained in any respect, either upon the Dropsy or diarrhœa. I then ordered the astringent mixture No. 5, to be taken occasionally, and the following bolus every night.

R. Calomel.

Opii ana gr. i.

Confect. cardiac. ʒi. f. bolus.

She took but two of these boluses before the symptoms of an incipient salivation appeared, which obliged me to desist from any farther use of it. I therefore ordered a scruple of cordial confection to be given night and morning, in order to support the patient, and restrain the purging, and that a scruple of rhubarb should be taken twice a week to suppress the spitting.

By this method the water was evacuated very freely by urine, notwithstanding the spitting continued to April the fourteenth, when an itch appearing she

she was made an out-patient. By this time the purging was also so effectually suppressed, and her strength so far increased, that she bore a dose of the haustus solutivus No. 8, very well before she went out of the house.

Sulphur in the usual forms was made use of externally, and internally, and all other medicines omitted, except an antiseptic gargle to fasten her teeth, which were loose.* She was cured of her itch, and June the fourth was discharged from the hospital in health,

* It is remarkable that two grains of calomel in this case occasioned a salivation, which continued fourteen days, yet in the fourth case a grain was taken for fourteen nights before a spitting came on, and in the eighth case thirty-one grains were taken in the space of three weeks, and no spitting produced. And I have heard of much larger doses being given in a shorter space of time to hydropic patients without any salivation.

health, without any other medicines being directed for her, but those above mentioned.

C A S E VII.

Thomas Brookes of Sevenhampton, aged fifty-four, ill three weeks with an ascites and anasarca, was admitted December the twenty-ninth 1763. Though this patient gave in his disorder as of three weeks standing only, yet it is probable that it was of much longer date.

A costiveness he complained of being relieved by bolus solutivus No. 18, I put him upon the asthmatic pills No. 11, as well with a view to keep the body open, as to carry off the water. These pills not proving sufficiently aperient, the pulvis purgans No. 19, was given twice in the first week, and continued afterwards occasionally.

The

The fwellings of his abdomen and legs being much reduced, I added the infus. hydropicum No. 20, with an intent to strengthen the parts as the water was drained off. But finding that the fwellings did not continue to subside I ordered five grains of calomel to be taken at night going to bed, that they should be repeated the next night, and that the pulvis purgans should be given the morning following.

This entirely answered my wish; in-
somuch that a saline mixture being
taken three times a day for a week,
and continued afterwards with the ad-
dition of tinct. martis gtt. 20 to each
dose, he was discharged cured Febru-
ary the second, 1764.

C A S E VIII.

----- Price, a gardener's wife at Glou-
cester, was taken ill with a pain in her
head,

head, and other symptoms of a Fever, in the beginning of July or August 1764, she was bled, blistered, and used other means for relief until at last the Fever became an Irregular Intermittent, and continued upon her to September; when she swelled suddenly in her abdomen, and legs. These swellings afterwards settled in the legs, and thighs only, which were swoln to a very considerable degree when I first saw her October the nineteenth. The Intermittent Fever had not yet left her, but continued in an irregular manner. In this state of things I ordered a bolus containing five grains of calomel, and ten of rhubarb to be taken at night going to rest, and that the powder No. 16, with the addition of one grain of calomel, to every dose, should be taken upon the day following the operation of the bolus, and continued.

November the seventh, the anasar-
cous swellings being very near gone,
M the

the intermissions of the Fever being distinct, and the fits slight, I ordered a repetition of the bolus, and that afterwards half a drachm of the pulvis febrifugus No. 1, should be given three times a day. November the seventeenth all the symptoms of Ague and Dropsy were entirely removed, and she had no relapse.

C A S E IX.

A lady, who had for many years been subject to hydropic complaints, was visibly anasarcaous from head to foot, and had water in her abdomen (which might not only be felt, but heard, upon pressure, in the same manner as the dashing of water may be perceived upon shaking a cask in which it is contained) came under my care, and was treated in nearly the same manner as the preceding, excepting the pulvis febrifugus. The same happy consequences

quences likewise attended this case, the hydropic symptoms having been all removed upwards of two years.

In the instances above mentioned the operation of calomel was chiefly as a diuretic. And yet by the concealed itch being thrown out upon Elizabeth Langford, case the third, and Mary Clarke, case the sixth, one should suppose that in those cases at least it had a tendency to the pores of the skin, as well as to the urinary passages. But I shall not here enter into a dissertation upon the operation of calomel, as I propose making some general remarks upon it after I have finished my history of its effects. I cannot however quit this subject before I have admonished the unexperienced not to look upon calomel as a specific in Dropsies, notwithstanding the great success that attended it in the cases now recited, and in others that might be mentioned;

since it will sometimes fail, whilst other medicines will succeed. But in general, as such small doses are attended with such very beneficial effects, it is surely not only safe, but commendable to give it a trial in all hydropic cases, provided it be administered in a prudent and proper manner,



SECTION III.*Of the Use of Bath Water in Dropsies.*

IN order to promote an evacuation of the urine in hydropic cases, I know not a more friendly assistant to calomel than our Bath waters, which are well known to correct the bile, and strengthen the habit, at the same time that they prove remarkably diuretic.

Jones, one of the first writers upon the use of the Bath waters, in the year 1572, places dropsies in his list of diseases cured by them.* And the short,
plain

* This observation is confirmed by Oliver on Bath Water, page 92. But he recommends bathing at the same time, as do also Guidot, Pierce, and other writers.

plain rules he lays down for drinking the waters in general are so well adapted to promote their diuretic quality, that I cannot but suppose he had this particular disease in view. His rules are these.

First. About an hour after sun-rising drink the water out of the spring; the body being first well purged, and digestion fulfilled.

Secondly. So much water as shall not be grievous to the stomach may be drank.

Thirdly. After drinking the water the party must walk gently a few paces in a temperate air.*

Guidot,

* Jones's *Bathe of Bathe's Ayde*, page 28. —The patient being directed to walk gently in a temperate air shews that the waters were intended to pass by urine. For if stronger exercise was used, or the patient walked in a warm air, the

Guidot, who in the year 1676 revived drinking the Bath waters after they had fallen into discredit, and almost total disuse, occasioned by an irregular, unseasonable, and unadvised use of them, recommends them in the dropsy.* And Pierce, who in 1697 published his observations made in three and forty years practice at Bath, mentions seven or eight, and says he could have added many more cases where the Bath waters were of great service in very obstinate dropsies. Some of these are so very extraordinary, that I should not do justice to the waters if I neglected giving a short account of them.

Observation 1st. A tipling butcher was swoln from head to foot by an exquisite

water might pass off by the pores of the skin. And if the air was cold they might then be evacuated by stool.

* Guidot de Thermis Britannicis, page 286.

quifite afcites and anafarca, and, as is not unusual in that difeafe, was exceffive thirfty, the more he drank the more he craved for drink, and the lefs he difcharged by urine. After prefcribing a purge or two of jalap the doctor put him upon the waters to quench his exorbitant thirft, which the Bath water infallibly does in all cafes beyond any other liquor. In ten days he apparently got ground, by lofing girt, and thus repeating, once a week, his former purge, in about fix or feven weeks time he was reduced to his priftine fhape. After which fome ftrengthening bitters being given he was difmiffed perfectly cured. He continued well a year at leaft (the Dr. thinks two or three) when returning to his old courfes the Dropfy returned, and his apothecary by the fame means recovered him a fecond, and third, if not a fourth time; and laftly he died of an inward impoftumation.

Obf.

Obs. 2d. Mr. Comin of Chelmsford in Essex, aged more than forty, was scorbutical, hydropical, and asthmatical, and prodigiously swoln from head to foot. Upon the road he consulted four physicians, who all dissuaded him from coming forward; one telling him that the bath would kill him, being pernicious in a Dropsy, and not beneficial in the asthma. And Doctor Pierce himself had no expectation but that he would die at Bath. However, after vomiting and purging, he was put upon drinking the waters, which passed sooner, and better than could reasonably have been expected, considering he could use little or no exercise with them, by reason of the shortness of his breath, and the weakness and bigness of his limbs, and belly.

Beyond expectation he got ground daily of all his symptoms. His appetite increased upon bathing (which usually lessens it for the present) he
N therefore

therefore interposed that with drinking the waters, and was by both manifestly relieved; so that in six weeks, or two months time, he went back recovered to a miracle. He came a season or two afterwards, but rather to confirm what he had got than upon any new occasion.

Obf. 3d. A grocer at Taunton, aged forty-six, came to Bath with his legs, and thighs greatly swoln, and so weak as hardly able to support himself: he had large red, and livid spots in both, made very little water, and that highly tinged with bile as in a jaundice. His countenance, and whites of his eyes shared in the same discolour, and under all this horribly desponding and melancholy.

In these circumstances the doctor scrupled at his bathing, fearing his liver was not sound, in which case the use of the bath is not so justifiable a remedy. As to drinking the waters,
which

which the doctor earnestly pressed, he had been too much used to ale, cyder, wine, and spirits to be easily persuaded to so insipid a liquor. However, a week's deliberation upon bathing being obtained, he took purges, with other medicines, and the waters between whiles.

These things changed his countenance, and the colour, and quantity of his water in some measure; and then, though sooner than the doctor wished, into the bath he went. And thus by medicines, and drinking, and bathing between whiles, he mended also the shape and colour of his legs, got strength in them, and returned at five or six weeks end to his own home, very much advantaged in all respects. And some years after the doctor received thanks from him.

Obs. 4th. An inn-keeper, aged sixty, besides the symptoms mentioned in the

last observation, brought with him to Bath in the month of May a violent cough, and his lower limbs were more enervated, infomuch that he could not stand upright, much less go at all. He took medicines, bathed, and drank the waters, and in five or six weeks returned home able to go about his business. He came again in September following; the better to secure his recovery before the approach of winter, which he passed, not only without relapse, but even then got more ground of all his symptoms; whereas formerly they usually increased, and were more afflictive to him at that season.

The remaining observations I shall pass over, though well deserving attention, least I may be thought too tedious, and shall only remark, that of the four remaining patients three of them were upwards of fifty years of age. These cases, so particularly related by an old experienced physician
at

at the latter end of his life, must give us an high opinion of the excellency of these waters. But what more especially has confirmed me concerning their efficacy in Dropsies, and bilious disorders is my own experience.

Before I resided at Bath I was much troubled with bilious complaints, and was twice within the seven years I practiced at Gloucester obliged to come to Bath on account of two very obstinate attacks from a jaundice. The waters were each time of great service, and relieved me for the time, but their effects were not permanent.

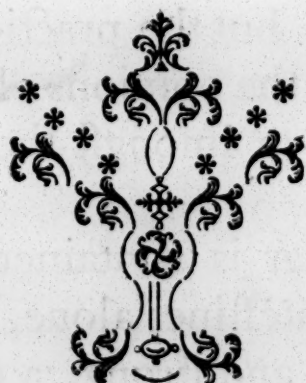
To carry off the accumulated bile, I occasionally, when at Gloucester, had recourse to small doses of calomel, and used such other medicines as the nature of my case seemed to require, but I was seldom free from the following symptoms.---A pain in the stomach, ---an uncertain appetite,---irregularity
with

with regard to stools, being troubled either with a costiveness, or a purging, and the stools, either deficient in the biliary tinge, or too highly saturated with it,---flatulency,---flying pains in various parts,---disturbed sleep, and restless nights,---a dull obtuse pain almost always in the right side,---a yellowness frequently appearing in my face, and eyes,---breath very short upon walking, or using any exercise,---and at the time I came to Bath a general leucophlegmacy, or anasarca was evident from the tightness of the wrists and collars of my shirts, which became too large after I had drank the Bath waters for some time ; notwithstanding I became in general more robust.

Three grains of calomel with five of rhubarb was my common dose for cleansing the first passages, which it always effected without any other assistant. As a diuretic, corrector of the bile, and corroborant I depended upon
the

the Bath water only, and have the satisfaction to find all my complaints gone.

When at any time a pain in my stomach, or costiveness happened to return, a glass or two of the King's-bath water certainly removed it: and yet I was once cured of a very obstinate diarrhoea by drinking the same bath water. But to effect these different purposes the water must be drank in different quantities.



SECTION IV.

Of the Effects of Purges in Dropsies.

PURGES have been recommended in Dropsies by the best authorities: and we are particularly advised to take care that they be sufficiently strong, to remove the cause with expedition, and often enough repeated to prevent a relapse. This is not only the advice of the ancients, but the practice is also encouraged by the opinions of Sydenham, and Boerhaave amongst the moderns.

When water is contained in the cavity of the intestines alone, and the patient young, and strong, a copious and quick discharge by stool has been promoted with advantage. Thus we are
told

told by Vanfweiten in his comment to Boerhaave's aphorism 1247, that he gave a no less powerful cathartic at a dose than two ounces of jalap, and four grains of turbith mineral. Two doses only of this medicine were given, and operated so effectually that an anasarca and ascites totally subsided, and the patient was perfectly recovered. But then the Baron adds that the patient was strong, never ill before, and did not exceed the thirtieth year of his age.

The following remarkable case happened within my knowledge, where a Dropsy was removed by a purgative medicine only. But at the same time I think it necessary to observe that the two next shew us that considerable caution is required whenever we make a liberal use of cathartics in dropfical cases.

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CASE

CASE I.

Thomas Jones of Gloucester, naturally a strong bony man, forty-five years of age, had a Dropsy by metastasis, in the following manner.

September the fifteenth 1763, having been ill three weeks with a pain in his bowels, and some times a purging, he was admitted a patient in the Gloucester infirmary. Lubricating, narcotic, absorbent, and aromatic medicines with rhubarb were occasionally used, and the patient was discharged cured November the third. This cure however proved but temporary. For he returned to the hospital, with the same complaint, upon the twenty-ninth of the December following.

The same medicines which seemed to have given relief before, together with the warm bath, proved now ineffectual.

effectual. January the twenty-fourth 1764, blood was observed to come away by stool. This last complaint, added to the others continued to May the twenty-fourth, when the patient being considerably emaciated, and in no respect mended in his health, was discharged no better.

After he had quitted the house some months I was surprized to meet him walking Gloucester streets in apparent good health. And upon enquiry found, that some time after his discharge his former complaints left him, and as those went off gradually he perceived a Dropsy advance, until at last his whole body was swoln from head to foot. Being in this situation, a neighbour advised him to take some jalap, which after two or three doses entirely removed his Dropsy.

The pain in this persons abdomen was general, but chiefly about the crift
O 2 of

of the os ilium, where a tumor was often, but now always to be felt, much about the sigmoid flexure of the colon, which I took to be a part of that intestine inflated. He often voided large quantities of blood by stool, without any other fœces, and at other times had stools without any blood attending them. Whether this blood was discharged from a cyst, or from the arteries as in a dysentery, we may easily account for the access of a Dropsy, from the impoverished state of the blood, after so much of it had passed off by the flux.

Thus Dropsies often follow too frequent venesections, uterine hæmorrhages, &c. But how a Dropsy arising from a debility proceeding from an impoverished state of the blood should be cured by jalap alone, without the assistance of corroborants, seems somewhat difficult to determine. This is the only case I ever knew cured of a Dropsy by
a

a purgative medicine only. And in my own practice I have never attempted it since the fatal event which attended the following patient, who was admitted at the Gloucester infirmary upon the same day that Jones made his first appearance there.

C A S E II.

Rachael Champion, aged fifty-four, ill six weeks with an ascites, was admitted September the fifteenth 1763.

As a difficulty of breathing attended the ascites, I ordered her the asthmatic mixture. After some days trial of this medicine, the patient being languid, and little urine made, I directed the saline mixture with the addition of a scruple of diuretic salt, and the same quantity of cordial confection to every dose. This last medicine occasioning uneasiness in the intestines the following

ing was directed, viz. Lac ammoniacum, and asthmatic mixture of each two ounces, syrup of orange peel an ounce. To be taken three large spoonful night and morning.

Gaining but little ground with these medicines, I directed a dose of the saline mixture with a scruple of cordial confection, and a drachm of oxymel of squills to be taken night and morning. This medicine was afterwards given three times in a day, but then it purged too violently; wherefore I increased the quantity of the cordial confection, and diminished that of the oxymel of squills to half a drachm of each.

From the time she began upon the squill medicines the tumor of her abdomen subsided gradually, and her breath became more easy until October the second, when going to stool she died suddenly in the necessity, having declared about a quarter of an hour before

before her death, that she was then as well, and as easy as ever she was in her life.

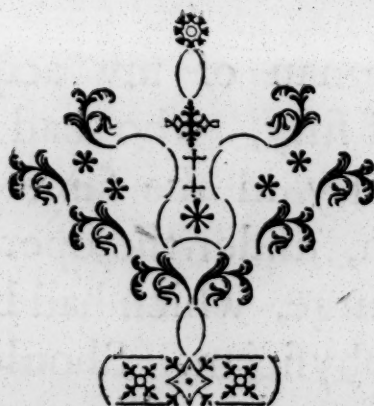
The unexpected death of this patient appears to have been occasioned by too sudden an evacuation of water by stool. And yet the quantity of cordial confection having been increased, and that of the squills diminished, some days before her departure, one could not have had any suspicion of such an event.

C A S E III.

A gentleman of my acquaintance, upwards of fifty, who had an ascites, died, exactly in the same manner as this woman, under the operation of a common purge, which had been ordered by his physician. Should not such instances as these make us cautious in the use of strong purges, and incline us rather

rather to give such as act more moderately, and at the same time have a tendency to promote the urinary discharge; especially as Sydenham,* who had great confidence in strong purges, had recourse to diuretics for persons of weak constitutions; and confesses that
“by the use of these alone he had seen
“desperate dropical cases cured in
“those persons whose weak habits
“would not bear purges.”

* *Tractat de hydropo*, p. 629.



SECTION V.

Of Tapping, Scarifications, Setons, Issues, and Blisters in Dropsies.

THE same objection that is made against evacuating the water of Dropsies suddenly by the use of strong hydragogue purges, namely the fainting, or death that sometimes ensue, holds equally good against tapping: but when this operation is performed, the inconveniences above mentioned are generally guarded against by the application of rollers, or bandages, to the abdomen; by which the intestines being kept closely pressed upon the large blood vessels, these last cannot dilate, as they would otherwise do, upon the pressure of the water being taken off.

P

And

And in case of such a dilatation the blood being received into those yielding arteries, in larger quantities than usual, would desert the head, and occasion faintings, and death, of which several instances happened before this necessary caution was observed.

A fatal event may also happen by the same means in consequence of scarifications, of which I remember an instance that happened whilst I attended St. Thomas's hospital. A strong robust man, labouring under an anasarca to a very great degree, was, within a few days after his admission, scarified upon his ancles. The water was evacuated plentifully, and the tumified body subsided to admiration; but he died within two days after the operation was performed.

Setons, issues, and blisters, as they evacuate the water more slowly are not so liable to the above objections: there
are

are however inconveniencies attending the use of these sufficient to make us wish to avoid them. The ancients had a great opinion of these topical remedies, and the Egyptians were particularly fond of scarifications in order to a radical cure. Prosper Alpinus however complains, that many who were entirely cured of immense dropfical swellings by scarifications, yet died by mortifications of the legs and feet caused by the incisions.* At present I believe they are generally used as auxiliaries, rather than principals in the cure of a Dropsy. And when any of these external drains have been found of temporary, or lasting service, I very much doubt whether the disorder might not have received as effectual, and radical a cure by internal means without their assistance.

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* Prosper Alpinus de medicina Ægyptiorum lib. iii. p. 221.

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U P O N

Diseases of the LIVER.

S E C T I O N I.

Of Indurations of the Liver.

WHAT a difficult task it has always been imagined to remove Indurations of the Liver, may be collected from various authors, whose opinions are in general delivered together in the following manner by Vanfweiten, in his ingenious comment upon Boerhaave's aphorism 950.

“ All

“ All practical physicians well know
“ how rare it is to make a cure of a
“ Dropsy whose cause is a disorder of
“ the abdominal viscera, more espec-
“ ally of the Liver. For although by
“ tapping, or any other evacuation, the
“ waters may be discharged from the
“ abdomen; yet the productive cause
“ still remaining, often inflexible to
“ all remedies, will procure a return of
“ the Dropsy, and that frequently in a
“ very short time.”

In this dangerous state, nothing that I have ever experienced acts so speedy, and effectual upon Indurations of the Liver as calomel. What is called an Ague-cake was totally removed in the case of Stratford before mentioned page 68, and in several others who have come under my care with Intermitting Fevers, and Dropsies. And I had the pleasure to observe its remarkable effects in the two following cases, where the tumor, and Induration of the Liver was the principal

principal object, unattended by a Dropfy.

C A S E I.

William Mafon of Hartpury, aged thirty-three, was admitted a patient at the Gloucefter Infirmary June the fifteenth, 1769. He had been ill fome confiderable time with a tumor in the region of the Liver; and a fifulous ulcer fhewed itfelf in his right fide, about a week before his admiffion. When admitted he looked pale, was very much emaciated, had a cough, attended with night fweats, and in all appearance was getting hectic very faft.

Whilst Mr. Chefton, one of the furgeons to the hofpital, with his ufual fkill and addrefs, took care of the ulcer, I endeavoured to reftrein the night fweats, and at the fame time moderate the cough, by giving him equal parts of
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lohoc No. 12, and elect. peruv. No. 3, of which he was to take often.

He went on taking this medicine only to July the tenth, when having gained some strength, I ventured to give him five grains of calomel, which were purged off the next morning with the hauſtus ſolutivus No. 8. Theſe medicines agreeing very well, I repeated them July the fifteenth, and July the eighteenth gave a general direction for them once every week.

By obſerving theſe directions, and continuing the medicine firſt ordered throughout the whole time, he loſt his ſweats, and cough, and the wound being heal'd, his ſtrength return'd together with his fleſh, and he was diſcharged cured Auguſt the ſeventeenth.

CASE

C A S E II.

John James of Lidney, aged fifty, ill eight weeks with a pain in his side, was admitted a patient at the Gloucester infirmary June the first, 1769. He looked pale and cachectic, with a yellow tinge upon the skin, and had a bad appetite, and pain in the side.

Having taken a purge of the haustus solutivus the day after his admission, he began upon the saline mixture No. 17. After he was settled in the hospital I examined the abdomen by the touch, and found that the Liver was prominent, and hard, upon which I ordered him to continue the saline mixture, and to take five grains of calomel, and a scruple of rhubarb at night twice a week.

The rhubarb not opening the body sufficiently, I directed the calomel at
Q night,

night, and the haustus solutivus the next morning. To be repeated twice a week, as with the rhubarb.

In this method he continued to July the eighth, when the tumor being entirely subsided, his complexion become more florid, the yellowness gone, and his appetite and strength restored, he was discharged cured. As the case appeared to be so dangerous, and the cure effected sooner than could have been expected, I would willingly have continued this patient in the house another week, but he finding himself perfectly well and able to work desired to go home to his family.

Bontius, who practised physic at Batavia in 1629, mentions an inflammation of the Liver, and consequent Induration, as one of the most frequent diseases not only at Batavia, but over the East-Indies in general. He recommends the cooling regimen, and directs
his

his principal intention of cure to opening the body gently, and promoting urine. This he attempted by giving tamarinds, and cassia, with terpine.

Doctor Lind confirms the remark of Bontius, as to the frequency of this complaint in those hot countries, and observes that it prevails more especially on the Coromandel coast.*

As to the cure, he says that the Fever being abated by bleeding, and a gentle purge, immediately recourse must be had to mercury, as a specific in this disease, and that by calomel taken inwardly, and the mercurial ointment applied outwardly, on or near the part, a gentle salivation of fifteen, or twenty days continuance must be raised.

He also adds that he has given mercurials with success to a number of pa-

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tients

* Lind's essay on diseases of hot countries, p. 88.

tients who coming from the East-Indies suffered a return of the disorder when in England, and that in three cases where mercury was not administered, the Liver came to a suppuration, of which two of the patients died.

Lastly he concludes his encomiums upon the efficacy of mercury in Liver cases in the following words.

“ The use of mercury in such cases
“ may appear empirical; but by the
“ experience of all who have practised
“ physic in India, it has been approved
“ as a most safe and excellent method
“ of cure.”----Lind’s essay, page 89.*

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* A remarkable testimony in confirmation of this assertion is just published by Mr. Crawford, late surgeon to the Earl of Middlesex East-India-man. Upon his passage home twenty-eight of the ships crew had large swellings of the abdomen like a Dropsy, attended with such a difficulty of respiration as to approach near suffocation, and

S E C T I O N II.

*Of the Use of Bath Water in Diseases
of the Liver.*

THE known efficacy of Bath waters in Liver cases, attested by physicians who formerly practised at Bath, and at all times evident to persons residing

other dangerous symptoms. Three of the men died, and a necessary dissection being made of one of them it appeared that the disorder, hitherto unknown to Mr. Crawford, was a monstrous enlargement of the Liver. Very fortunately he gave small doses of calomel to the survivors, and upon their arrival at Erith, from being unable to move from one situation to another, and many of them labouring for breath in a terrible manner, they were all, except two, able to walk out of the ship, most of them recovered of their disorder; as were the others also, upon admission into the London hospitals.

siding here, rendered it as I thought unnecessary to add any thing more to what I have already observed upon their use in such cases. But having found them spoken of slightly by some physicians who live at a distance, and the benefits received at Bath attributed to medicines, and the amusements of the place, rather than to any peculiar virtue in the waters, I think it a duty incumbent upon me to add, something farther upon this subject.

Jones, who is the oldest writer upon Bath water, that I have at present an opportunity of consulting, appears to have been acquainted with their use in Liver cases. He mentions bathing, and drinking, and sets down hardness and coldness of the Liver as one of the diseases where the Bath waters are especially useful.*

Jorden,

* Jones's Bath's ayde, p. 6.

Jorden, who wrote when drinking the waters was out of fashion, says, that bathing in them does mollify, and dissolves hard tumors.||

Guidot, by whose influence the internal use of Bath waters was revived, recommends drinking them, as being of great service in disorders of the stomach, Liver, and spleen.*

Doctor Pierce, after forty years experience of the waters, informs us, that scirrhus tumors of the abdomen have been relieved by drinking these waters, bathing being sometimes interposed.†

Oliver says, Bath water renders all the juices in the body more fluid, promotes

|| Jorden of the nature and uses of Bath water, p. 138.

* Guidottus de thermis britannicis, p. 282.

† Bath memoirs or observations in forty-three years practice, p. 324.

motes their circulations, and due secretions. Whence obstructions of the viscera, spleen, and Liver are removed.†
-----He says also, that in the jaundice nothing is more proper than Bath water, whose cleansing, opening, dissolving, diuretic, and strengthening qualities are admirably well suited to its cure, purging now and then the body gently.†

Even Doctor Lucas, who endeavours to take from Bath waters most of the good qualities assigned to them by others, allows that acrimony, and redundancy of bile are effectually remedied by a diluting course of these subacid waters.*

After

† Oliver's practical dissertation on Bath waters, page 48.

† Ibid. p. 94.

* Lucas on Bath water, sect. 294.

After so many testimonies of the utility of these waters in disorders of the Liver, published by physicians of eminence who practised upon the spot, it is very surprizing to find a gentleman, of acknowledged candor and ability in his profession, expressing his opinion of them in the following terms.

“ The waters of Bath have *some* credit of being serviceable in a jaundice.
“ But it must be observed, that icteric patients generally recover wherever they are; and it may be doubted, whether they recover the sooner for the use of these waters. However, there can be no medical reason for dissuading any one in a *simple jaundice* from going to Bath; because the waters are perfectly safe, and the proper medicines may be taken there, as well as any where else; while the vacancy from care in such public places, together with the change of air, and water, and objects, may be of some
R “ use

“ use to the general health, and thereby
“ facilitate the cure of this, as they
“ often do of many other chronical
“ disorders.”*

That the use of Bath waters in a jaundice is not a thing of that indifference the learned gentleman would insinuate, is well known to all practitioners residing at the place, and I have twice very sensibly experienced, viz. In the years 1764, and 1767. The first time I came in the month of March with an obstinate jaundice, and left it at Bath. In 1767 I came in August with the same complaint, but the waters heating me I went home, by the advice of that most eminent and successful practitioner Dr. Moysey, and returned in September; when, the weather being much colder, I drank the waters for six weeks, without any of the inconveniencies I before experienced, but on the contrary received

* Medical transactions, vol. 2d. p. 168.

ceived all the benefit that could be expected from their use. The comfortable refreshment that a person in a jaundice perceives upon drinking these waters, and the speedy alteration for the better, which he finds in his constitution, where the waters agree, cannot fail to impress upon his mind an high opinion of their virtues in this complaint, and excite in him a grateful remembrance of the benefits he has received from them.

Whenever any considerable inflammation exists, in any part of the body, Bath waters will in general be found improper. Thus a patient, under a course of these waters, indulging himself too freely in wine, high fauces, violent exercise, or suffering any considerable degree of inflammation from a wound, the gout in any part of the body, or from the heat of the weather, will soon find the ill effects of drinking Bath water.

As the Bath waters are by their effects known to have a stimulating quality, it will be matter of great moment that they should be used at such seasons of the year as are best adapted to the nature of the patients complaints. Where the constitution is languid, and the blood creeps slowly through the torpid arteries, the heat of summer will not prevent, but rather promote the benefit to be expected from the water; and, where more than ordinary care is used, the waters may be drank with safety and advantage during the severity of winter. But reason suggests, and the experience of Doctor Pierce dictates to us, that the best seasons for drinking them are those freest from the excesses of heat, or cold, viz. spring, and autumn, which were the seasons used before Doctor Pierce's time, until altered by the London physicians, who chose to keep their patients in town during the cool weather, and send them to sweat at Bath, or cool themselves at Epsom,

Epſom, or Tunbridge during the ſummer.*

Though Doctor Pierce might have juſt reaſon to complain of phyſicians behaving in this unjuſt manner to their patients, from principles of intereſt, in the diſſolute reign of Charles the ſecond, when the nation, being ſuddenly removed from the greateſt diſtreſs and confuſion to a ſtate of ſecurity and licentiouſneſs, had no fixt principles, yet it is to be hoped, that our bretheren of the faculty are at preſent actuated by more generous ſentiments; and therefore, when I meet with modern authors, who do not attribute to the Bath waters that degree of credit and reputation they juſtly deſerve, or endeavour to detract from them what they have already gained, I cannot but look upon ſuch gentlemen as not having acquired a competent knowledge of them,

* Pierce's Bath memoirs, p. 387.

them, or that they are prejudiced against them, in consequence of their being improperly used.

By the most exact analysis of the waters that has hitherto been made, chemists have not been able to gain a sufficient knowledge of their contents, to account for their various operations, in consequence of their component parts, taken seperately. If we search for iron, in order to account for their invigorating quality, we shall find they contain but a very small proportion of that mineral.* When we endeavour to prove the good effects of Bath water in cutaneous foulnesses of the skin as proceeding from the sulphur to be met with in the water, it appears that even
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* No more than between a thirty-seventh and thirty-eighth part of one grain of iron supposed to be contained in one pint of the King's bath water.
—Lucas on Bath water, sect. 171.

the existence of it is disputed.* The existence of salt in these waters is more easily proved, but of what nature, or of how many kinds this salt may be, has occasioned much altercation and dispute.

Since then the impregnation of our hot baths are so subtle as to baffle the inquiries of the most curious,† and their virtues depend not upon one, but all the materials of which they are composed, blended together in an unimitable manner;‡ we must necessarily have recourse to experience of their effects for ascertaining the propriety of their use. And here we find the following contrary qualities.-----They frequently stimulate, and heat the body by their internal,

* Lucas, sect. 132.

† Wynter of bathing in the hot baths of Bath, page 79.

‡ Oliver on Bath waters, p. 15.

internal, or external use: yet will often allay thirst better than any other liquor.---By drinking and bathing they restore wasted paralytic limbs; yet by bathing imprudently they relax too much, and do harm in such cases.-----They restore a lost appetite by a moderate use, but destroy it by being drank too long.---They will purge one person, and prove astringent to another; and have different effects upon the same person at different times, or in proportion to the quantity drank.-----They sometimes prove diuretic, sometimes diaphoretic.----The different baths are also known to have various effects. Thus the water of the hot bath usually opens the body, that of the King's bath proves astringent. But the effects of these in some particular constitutions are directly the contrary.

From these various properties in the waters, we may perceive how necessary it is to have a constant, and watchful
guard

guard over their operation, in order to prevent any ill consequences that may arise from their imprudent use, either by drinking, or bathing. And we may also from hence see how easily a physician may be deceived in his opinion of them, who forms his judgment upon accounts sent him by his patients, whilst drinking, or bathing in these waters at an hundred miles distance; since they will of course omit mentioning any imprudent steps they may have taken, and many circumstances of their cases necessary to be mentioned.



SECTION III.*Of Abscesses in the Liver.*

A Suppuration will take place in the Liver as well as in other parts of the body, but Boerhaave informs us that mild, or laudable matter will seldom be found there, unless it be in small portions on its outer surface.* This is also confirmed by Bontius, who tells us that if the abscess is formed in the parenchyma, or substance of the Liver, the disorder is incurable, but that if it has its seat in the external part under the surrounding membrane (which very often happens) then it is a common

* Hermanni Boerhaavii aphorismi, No. 933.

common practice to penetrate through the muscles by a cautery, and that afterwards making an incision with a scalpel into the cyst a sanious matter, like the washings of flesh, flows out.*

Bontius, in another part of his works, gives us the following remarkable instance of a fatal abscess in the parenchyma of the Liver. An English soldier suffered an inflammation of the Liver, which terminated in an hepatic flux, a tumor in the hypochondrium, which before was very visible, entirely vanishing. After languishing in this state for near six months, and being emaciated to the greatest degree, he died. His body being opened, in the place of a Liver only a sac appeared, composed of the outward membranes of the Liver, but greatly thickened; in which however was found some sanious mat-

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* Jacobi Bontii methodus medendi in indiis orientalibus, cap. 8.

ter, like the washings of flesh, being of the same kind with what the patient had voided downwards for a long time before his death, which happened in the month of April 1629.*

The opening of abcesses after inflammations of the Liver, when they adhered to the peritonæum, and formed a tumor outwardly, is mentioned by Lind, in his essay on diseases incidental to Europeans in hot countries.†

And Ruyfch gives us the case of a young student in surgery at Amsterdam whose Liver, after an inflammation, came to suppuration, and was opened externally by the lancet, a potential cautery having been previously applied. A large quantity of pus flowed out, and the wound being in a short time

* Jacobi Bontii observationes aliquot selectæ ex dissectione cadaverum desumptæ, obs. 9.

† Lind's essay, p. 91.

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time cleansed, and healed, a fever, and difficulty of respiration, which had attended the patient, left him. Ruysch says this is a rare case, but not unheard of.

This account I have taken from Mangetus's *bibliotheca medico practica*.* But as I can find no other instance similar to it, neither in that large collection of cases, nor in Bonetus, Morgagnus, nor any other practical author within my knowledge, I hope it will not be thought improper for me to offer one that fell under my own inspection.

William Fowler of Stroud, aged thirty, was admitted a patient at the Gloucester infirmary October the thirteenth 1763. About the latter end of July preceding, he was seized with a very acute pain in the right side, attended with frequent rigors, and a Fever.

* Tom. 2d. lib. 8, p. 783.

ver. These complaints having continued for three weeks, he began to void blood mixed with pus in large quantities, having as many as ten stools every twenty-four hours. The blood and pus continued to be discharged daily, and in large quantities to the time of his admission at the hospital. The Fever also continued, he appeared hectic, and was much emaciated.

From the appearance of the excrements, and pain in the bowels, this disorder was deemed a dysentery, and as such treated with emollients, aborbents, and anodynes, both by the mouth, and by glysters, but to no purpose, the complaint continuing as violent as ever, notwithstanding all the means used to subdue it. Some time after his admission, upon a more close examination, made jointly with Mr. Cheston the attending surgeon, it appeared that he had a tumor in the region of the Liver. In this tumor he had
felt

felt pain, but not so early as in the part above-mentioned. What state it had been in I know not; but when I first examined it with Mr. Cheston it was neither hard, nor prominent, wherefore it was then determined that no operation could take place, but that the whole must be left to medicine.

A discovery of this tumor being made, I had no doubt but that his true disorder was an abscess of the Liver, which, having broke inwardly, was the occasion of the purulent matter seen in the excrements. In this state of things, with small hopes of success, I put him upon a soft nourishing diet, and gave him some balsamic emollient medicines, examining from time to time whether the tumor in any part appeared pointed, so as to afford any prospect of its being evacuated outwardly by art. After waiting some time, the tumor was observed to be pointed, in the very part where the
pain

pain was first felt, viz. about three or four inches distant from the navel, and rather below it. The management of the tumor being then committed to the care of Mr. Cheston, I should not do him justice was I to give an account of the operation in any other words than his own, as taken from an ingenious book published by him in 1766, entitled *pathological inquiries and observations in surgery*.

“ *As his pain appeared quite local,
“ I was willing to try the effects of a
“ beer poultice, which was therefore
“ applied to his side twice in a day,
“ but without any immediate relief to
“ his complaints: this method how-
“ ever was continued near a fortnight,
“ as the part seemed daily to enlarge
“ externally.

“ In a little time the integuments
“ which never were discoloured, and
“ before

* *Pathological inquiries*, p. 23.

“ before yielded to the pressure, with
“ scarce any difference from their na-
“ tural state, projected outwards as in
“ an ascites, though, with this differ-
“ ence, that in the ascites the abdomen
“ is uniformly distended, while here
“ the tumor, entirely local, occupied
“ the right hypogastrium only. An in-
“ distinct fluctuation might likewise be
“ perceived within the swelling by a
“ careful examination, which in a few
“ days becoming more sensible, I re-
“ solved to open it. During all this
“ time his purging continued, and mat-
“ ter was discharged by stool, as be-
“ fore the tumor appeared.

“ I therefore plunged a very large
“ sized trocar into the depending part,
“ which seemed most favourable for
“ continuing a discharge, and upon
“ drawing out the perforating instru-
“ ment, there issued through the canula
“ a very foetid and offensive matter, at
“ first thin and sanious, but which, as
T “ the

“ the discharge continued, grew thick-
“ er, ’till at last it was so viscid and
“ gelatinous that it passed with the
“ greatest difficulty. Upon weighing
“ it afterwards it amounted to five
“ pounds troy weight. During this dis-
“ charge we kept a constant pressure
“ upon the abdomen, as our patient
“ grew fainty, and his heart beat with
“ an encreased velocity, in proportion
“ as the matter was evacuated. The
“ abdomen being quite sunk, and the
“ matter to appearance all discharged,
“ I passed a roller round the abdomen,
“ and leaving the canula in with its ori-
“ fice stopped, he was then put to bed,
“ where in a little time he recovered
“ his spirits, and seemed cheerful.

“ Within an hour after the operation,
“ he voided a chamber pot full of urine
“ at one time, a larger quantity, as he
“ thought, than all the urine he had
“ discharged for a fortnight before.
“ The

“ The succeeding night he passed easy,
“ with a natural comforting sleep.

“ On the morrow the same kind of
“ matter was evacuated through the
“ canula to the amount of fourteen
“ ounces. His stools, which before
“ the operation were so troublesome
“ both in quantity and quality, now
“ were natural, and discharged not of-
“ tener than once in twenty-four hours.
“ As the matter had thus so free an exit,
“ I suffered the canula to remain in
“ three or four days, and then supply-
“ ing its place with a sponge tent dilated
“ the orifice in the abdomen so much
“ as appeared necessary. A free dis-
“ charge was continued by this means ;
“ so that in a fortnight from the opera-
“ tion it amounted, upon the lowest
“ computation, to seven pounds more,
“ upon the whole twelve pounds.”

After the operation the diarrhœa pre-
sently ceased, and his stools became
T 2 natural,

natural,*. His night sweats also left him, his appetite increased, and with it his flesh, so that in the space of eight weeks from the operation being performed, (without taking any other medicine than a purge now and then when the flux of matter from the side began to abate) having regained his strength, and a good state of health, he was discharged cured February the ninth 1764.

Some objections may be made to this being an hepatic abscess. The part most affected, and where the pain was first felt, being even below the navel makes it probable that the seat of the complaint was rather in the intestines, than in the Liver, but the event of the case inclines

* The regular discharge by urine and stool, being restored so soon after the operation, shews what an effect the pressure of the abscess had upon the natural functions. To these may likewise be added the increased velocity of the heart's motion, as above mentioned by Mr. Cheston.

inclines one to think otherwise. For though the place pierced by the trocar was indeed below the navel, yet when, by the matter being evacuated, the parts were suffered to contract, it then appeared parallel to it.

*Mortgagni gives us the history of a woman under his care who died of a jaundice at forty years of age, the right lobe of whose Liver appeared extended below the fundus of the stomach after death, and whilst living an hardness might be felt down the whole right side as far as the os ilium, and even below it, which part pained her when touched. Other instances might also be given of Livers extending to the hypogastric region.† It is not therefore to be wondered at if the Liver in Fowler's case, affected in its large right lobe, and containing

* De Sedibus et causis morborum per anatomicum indagatis.—Epistola 36. articulus 2.

† Vide loc. citat artic. 3.

taining such a quantity of matter, should descend so low as the part pierced by the trocar.

No jaundice appearing in his case may be thought another objection to the disorder being in the Liver. In Mangetus† we meet with the case of a tradesman who after an inflammation of the Liver at length fell into an alvine flux, and voided blood concremented. After languishing six months he died, being emaciated to the greatest degree imaginable. Upon opening the body, instead of the Liver, there appeared only a thick membranous bag in which was found bloody watery pus. Neither in this case, in that quoted from Bon-tius, nor in some others that might be mentioned, from authors who seem to have been sufficiently careful, and exact in the enumeration of symptoms, any
jaundice

† Mangeti bibliotheca med. [practic. tom. 2. page 794.

jaundice is taken notice of, notwithstanding the livers were so greatly diseased, that their parenchyma was entirely wasted, and in the following instance of a Liver, which upon dissection appeared highly diseased, it is *positively* asserted, that no jaundice appeared.

Doctor Simson, in the first volume of the medical essays, the thirty-fourth article, has observed the Liver increased at least a third in its bulk, with a great collection of hydatical tumors in its most central part, in a patient who never had the least appearance of the jaundice, tho' labouring for many years under great pain, and sickness from this bad state of the Liver. From these instances we learn that a jaundice is not a necessary attendant upon a diseased Liver, whether greatly enlarged, as in Dr. Simson's case, or entirely wasted as in the other cases I have mentioned.

The

The blood and matter, discharged in great quantities from the intestines as in Fowler's case, may be more reasonably supposed to come to them from the Liver through the biliary ducts, as it did in the case taken from Mangetus, and in that mentioned from Bontius, than from any other part, and a more convenient passage being opened for them they ceased to flow by their former course. But what tends farther to confirm the supposition that the Liver was the part affected is the observation of Mr. Cheston, that when he examined the parts after the operation with a long flexible, and very large headed probe, it would pass in no other direction, but to the Liver.*

* Cheston's pathological inquiries, page 26.

A N
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U P O N T H E
E P I L E P S Y.

S E C T I O N I.

Of the Nature of the Epilepsy.

THE Epilepsy is too well known to need any description. It is very uncertain in its origin, and it is impossible to mark out any one single method of cure, that will hold good in a disorder, which arises from a great variety of causes, essentially different from one
U another.

another. I shall however mention some instances of success, without stamping any mark of infallibility upon them.

Whytt, as I before observed,* places the Epilepsy, and Intermitting Fevers, in the same class of nervous disorders. And Fuller, as I before mentioned,† recommends to us, as almost a specific in Epilepsies, the same medicine that I found most effectual in removing Intermitting Fevers.

The similitude between these two disorders is farther illustrated by both of them, sometimes beginning in particular parts, and being either confined to those parts, or thence extending over the whole corporeal system. We meet with some few instances of this in Intermitting Fevers.‡ And in the Epilepsy they are so common, that no practitioner

* Page 26. † Page 29. ‡ Page 26.

practitioner will require farther proof, than what his own observation must have afforded.

SECTION II.

Of the Use of Ligatures in the Epilepsy.

WE are told, that when the first symptoms of an approaching Epilepsy are perceived in the extremities, and Ligatures applied above the part affected, the disorder may be confined to that part, and not suffered to ascend beyond the Ligature. Of this I had the satisfaction to make a successful experiment in the following case.

Being sent for some years ago to P. K. a farmer's daughter near Gloucester,

of about twenty years of age, troubled with Epileptic fits, which frequently returned, I found her in bed, and seeing her in the agony of a paroxysm staid by her 'till it ended. Upon enquiring in what manner the fits came on, I was informed, that they always were first perceived in the feet, that they ascended thence by degrees to the body, and lastly to the head, when the convulsions became violent, and universal.

Upon this intelligence, remembering the accounts given of the effects of Ligatures in such cases, I got the patients garters, and having doubled them, and prepared two short bits of sticks, I placed them one below each knee, in the manner of tourniquets, used previous to the amputations of limbs.

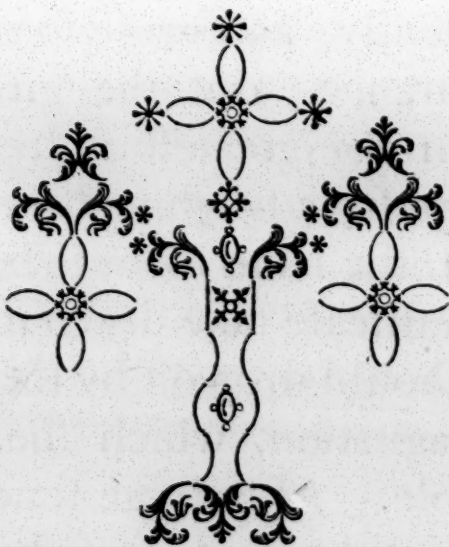
Having placed my tourniquets, I waited the approach of the next fit:
and

and the patient telling me, that she felt the disorder in her left foot, I immediately turned the tourniquet upon that leg. This stricture stopping the ascent of the disease, the foot shook considerably, and she soon informed me, that the other foot was also affected. I then committed the care of the left tourniquet to the patient's sister, and twisted that I had put loose upon the right leg.

This method had the desired effect. The Epilepsy proceeded no farther than the Ligatures, but the feet shook most violently, and made so ridiculous an appearance, that the girl herself, though in the greatest distress, could not refrain from laughing heartily, and almost at the same instant, begging us to let the disease take its course; least her feet should drop off by the violence of their agitation, which she said was intollerable. After some time the convulsions in the feet ceased; when I loosened the tourniquets, and left her,
giving

giving directions to her mother and sister to repeat the same method, whenever the fits returned.

The fits afterwards became weaker, and the same means being used, whenever notice was given of their approach, they were at last entirely cured without medicine; and the girl informed me, within this half year, that she had been free from them ever since.



SECTION III.

*Of the Cure of the Epilepsy by
Trepanning.*

EPILEPSIES are also occasioned by acrimony, or irritation of any kind, in, or about the head. Thus the stimulus given to the nervous system by dentition, an acrid serum vellicating the tender coats of the brain, a turgescency of the vessels within the cranium, and hydatids compressing the brain may all give rise to Epilepsies.

The several methods of cure adapted to these various causes, already sufficiently treated of by most practical writers upon this subject, I shall not expatiate upon; but think it necessary to produce one case of an Epilepsy arising from

from an hydatid within the scull being cured by trepanning, because the method of cure, as mentioned by some authors of credit, has been rather doubted.

Doctor Monro, in his treatise upon the Dropsy, speaking of the hydrocephalus, in a note at page 152, gives several cases of hydatids in the brain. And adds, that Wepfer was assured by a surgeon of credit that hydatids in the brain was a common disease among the horned cattle in Switzerland, and shewed itself by a giddiness or vertigo. When the country people observe this, they strike the head behind the horns with an hammer, to try if by the sound they can distinguish any preternatural hollow below, and if they imagine they do, they immediately trepan the part, put a quill into the hole, and suck out the hydatids, if they lie near the surface of the brain, and so make a cure: but if the hydatids lie so deep in
the

the brain that they cannot suck them out, they immediately kill the creature. This operation the surgeon assured him he had seen done, and attended with success. *De Apoplect. loco affect.* p. 59. He afterwards tells us, that he himself saw it tried upon an ox afflicted with giddiness, when a large number of hydatids were sucked out; but the vertigo still continuing they killed the creature, and, upon opening the head they found a number of hydatids in the ventricles of the brain. *Hist. Apoplect.* 14. “These
 “ histories although related by Wepfer,
 “ an author of credit, yet seem too
 “ much upon the marvellous, and, at
 “ any rate, the uncertainty of the ex-
 “ istence of the disease from the me-
 “ thod taken to discover it, and the
 “ danger of the operation, will, in all
 “ probability, prevent its being ever
 “ attempted on the human subject.”*

X

This

* Monro's essay on the Dropsy, p. 152.

This very operation, which Doctor Monro apprehends to border so much upon the marvellous, I have seen performed, in a manner but very little different from the operation mentioned by Wepfer.

A bull, belonging to John Heard, a tenant of my father's at Hempstead near Gloucester, was troubled with this disorder. When I first saw him he was lying down, and appeared perfectly at ease, and well. Upon making him rise he stretched himself; and afterwards, beginning to turn round, his eyes were distorted, and with a sudden spring leaping up, he fell down again immediately upon his back, with great violence. He then appeared in all the agonies of an Epileptic fit, and when he recovered out of it was for some time very stupid. By degrees he returned to his food, and, until he suffered a fresh attack, seemed in good health.

I was informed that young cattle only are subject to this disease, it never making its first attack after the age of two years. I was also told that the consequence of the disorder would be certain death, except it was relieved by opening the head, and taking out a bladder of water; which was an operation to be performed in the present case within a few days. Notice being given me of the day appointed, I took with me Mr. Cheston, a very ingenious surgeon at Gloucester: and the Rev. Mr. Bishop, one of the masters to the college school there, at his own request, was also of the party.

The bull, being confined in a barn, upon this occasion, was thrown with a rope in the usual manner, and afterwards kept down by the weight of several men upon his body. Upon his falling a fit came on, and continued during the whole operation. This gave the operator time to perform his work

X 2 leisurely,

leisurely, without interruption, and afforded us an opportunity of seeing the whole process distinctly.

A large part of the scalp, about the size of a man's hand, and in the shape of a parallelogram, was on three sides separated from the skull, but suffered to remain entire on the fourth, towards the nose, and turned down in that part. The skull being thus laid bare, the operator, by means of an hammer, and a knife with a short strong blade, such as stay-makers use to split whale-bone, took off a part of the skull, of about an inch square, which I have in my possession. By striking the back of the knife with the hammer, cautiously, in order to take out the piece, I apprehend he was enabled to judge of the thickness of the bone, which is here very unequal, and thereby avoided doing any injury to the dura mater.

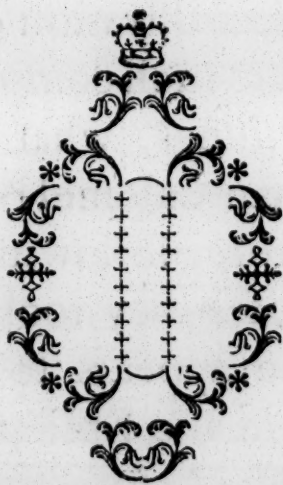
The

The head being in this coarse, but effectual and safe manner trepanned, the next thing was to open the dura mater. This being done, in a very cautious manner, with a sharp penknife, a little vesicle began to advance through the aperture, and gradually encreased to the size of a wall-nut, when the operator turning the bull's head, so as to give the bladder a depending position, it burst, and the contained water flowing out, the operator laid hold of the containing membrane, and by degrees with proper caution extracted it entire, as he said, if the cyst was not taken out clean, the disorder would certainly return. After this, the part of the scull that had been laid bare was again covered with the flap, and some common dressings* laid

* These dressings consisted of pieces of cloth dipped in a melted composition of which pitch was the chief ingredient, and were to remain 'till they came off by time.

laid over; by which means the bull, after being kept in the house a few days, soon recovered, and was perfectly freed from his disorder. I do not remember that the operator tried with his hammer to sound the scull, and find an hollow place in the manner mentioned by Wepfer. But before he began the operation he examined very carefully the centre of the forehead where the hair divides in different directions, as the bone of that part in such cases is often softened, and sometimes rendered very thin, I suppose from the pressure of the cyst internally. He said he knew which lobe of the brain was most compressed by the hydatid, by observing whether the beast turned to the right, or the left before he fell into a fit. In the present case the beast turned to the left, and the hydatid lay nearly in the centre, but rather inclining to the left. If the symptom above-mentioned holds good in the human subject as we are told it does in the
the

the horned cattle; it is to be hoped we might, by observing it, and after death inspecting the brains of the deceased, be at last led to the same method of relief, by knowing the exact place where to perform the operation. This matter appears to me so remarkable, and may possibly prove of such consequence, that I have not thought much of my trouble in writing, and I hope the reader will not be dissatisfied with reading this long, and otherwise unnecessary digression.



SECTION IV.

Of the Use of Calomel in Epilepsies.

BESIDES the causes already mentioned, Epilepsies often arise from impurities in the first passages, or alimentary canal. How often have these disorders been occasioned by worms, and viscid matter obstructing the intestinal tube, which have been removed upon the administration of medicines appropriated to such complaints? Upon this view of things, what bids fairer to give relief than Calomel? and accordingly in the three following cases, from whatever causes they took their origin, this medicine appears to have had as great effects in the Epilepsy, as in any of the disorders before-mentioned.

CASE

C A S E I.

Mary Owen, aged fifteen, a robust strong country girl, living near the city of Gloucester, was seized with violent Epileptic fits, July the seventh 1766, three days after which I was desired to visit her. Upon my enquiry her mother informed me, that, for upwards of six months preceding she had been once or twice in a week, and sometimes every day, troubled with a pain, and swelling in her stomach, which complaints continued until she was taken with violent fits, which totally deprived her of all sense for three days, excepting only some short intervals, which taken together might amount to about two hours.

She had been bled before I saw her, wherefore I got down the Calomel bolus No. 21, and purged it off with the common opening draught. This operated

rated like a charm, her senses returning with the operation of the physic, so that the next day she could walk about. I then ordered her a dose of the tinctura foetida, to be taken thrice a day in a draught of water; which being continued for a few days, a repetition of the bolus and draught before ordered carried off all the remains of the Colic, and Epileptic symptoms; and they never afterwards returned.

C A S E II.

Isaac Dun of Gloucester, aged fifteen, was admitted an out-patient at the Gloucester infirmary Aug. the eleventh 1763, having been ill six months with Epileptic fits.

After he had lost a sufficient quantity of blood, I directed him to take half a drachm of valerian root powdered twice a day. This being continued for
some

some days without any effect upon the fits, I ordered the Calomel bolus, and solutive draught to be taken twice a week. This soon stopped the fits, and the patient was discharged cured October the sixth, and had no relapse. I am sensible that the operation of Calomel in these cases will be by some attributed to the critical time of life of these patients; but be that as it will the success was certain, and therefore the cases appear to merit attention.

C A S E III.

Edward Williams of Charfield, aged twenty-one, ill eighteen months with Epileptic fits, was admitted a patient at the infirmary March the ninth 1769.

His first complaint was a dull heaviness, attended with pain, over his whole head, which continued for about a week. When this went off his eyes

Y 2

became

became very weak, and in his imagination he perceived a light like that of a candle, at about three yards distance. After continuing usually about a quarter of an hour, this light departed, and he suffered a violent head-ach for the space of twenty-four hours; the violence of the pain then abated, and in three or four days entirely left him. In a few days it returned again in the same manner, and thus he had been affected for eighteen months preceding his admiffion, whereby he was rendered almost incapable of any kind of work. The light above-mentioned did not always appear at the same distance from him, being often within a foot; but he observed, that the greater the distance was, the more violent was the head-ach that followed. If both eyes were open, or both shut, or one open, and the other shut, or whether night, or day, the effect upon the senses was the same.

Once

Once in a fortnight, a month, or six weeks, he was troubled with fits, in which he was convulsed, but not violently, and foamed at the mouth. When he recovered out of these fits he trembled exceedingly, could not stand, was very thirsty, but did not sweat. The fit continued about a quarter of an hour, and he was sensible of its approach for several days before it happened. It was remarkable that he never had more than one at a time, and it was always preceded by the above symptoms, and came on after the violent pain in the head.

After bleeding, vomiting, and giving him a dose or two of Calomel, with purging draughts upon the mornings following, I was informed that he found symptoms of an approaching fit, which he expected in a few days. In consequence of this intelligence, March the twenty-second, sixteen grains of the powder of the flowers of the cardamine

mine were administered at bed-time, and the same dose ordered to be taken the next morning, an hour before he rose. It was given in a draught of common julep, and directed to be repeated every morning, and evening.

The first dose was taken at nine at night, going to bed. At twelve it sweated him much, but the perspiration abated, and was entirely over by the next morning; when, at eight o'clock, he took a second dose. This also made him perspire freely, and he lay in bed for two hours until the sweat was gone off. The evening dose taken on the twenty-third sweated him, but not so much as either of the others; and that of the next morning not at all. When admitted at the hospital he had a sickness at stomach, which yet continued, but not in the same degree; he slept well, but his head was confused, and he was rather drowsy.

He

He went on taking his medicine to March the twenty-eighth, when he had a fit at five in the morning, after half an hour previous notice. The apothecary being called observed the spasmus cynicus, and that he was convulsed, but not strongly, in other parts of the body. The fit continued about a quarter of an hour, and as soon as it was over he took one of the cardimine draughts, which threw him into a great sweat. The apothecary observed that in the fit the patient's pulse was the strongest he ever felt. And when I came to him I found his pulse very full, and that he had a violent pain in his head.

In these circumstances I did not think proper to urge a sudorific medicine any farther, wherefore after two bleedings, and a Calomel purge, April the ninth, I gave him a decoction of bark with valerian, which was left off April the fifteenth. He was then bled a third time,
and

and I ordered him a Calomel purge twice a week.

April the twentieth, I tried what sweating him with camphire and nitre would do, but it did not serve him, his head being yet affected, I then ordered a blister to his neck; an issue to his arm, and three leeches to the left temple, where the pain chiefly was. The latter was of service to him: he continued the Calomel twice a week from the time it was directed, and May the eleventh he was discharged cured, having had no fit since March the twenty-eighth.

Although in the above case no fit happened after the patient ceased taking the cardamine, yet I cannot but look upon the blood taken away, and the Calomel purges as having the most considerable share in the cure.

A N
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UPON THE
C O L I C.

THE Colic is properly speaking, a pain in the colon or great intestine; but in the common acceptation of the word it signifies a pain in any part of the stomach, or bowels, the particular species being afterwards distinguished by the name of the part
Z affected,

affected, or of the original cause.* Thus we find Colics under the denomination of bilious, hysteric, gouty, &c.

I shall not in this place attempt to point out the different methods of cure necessary in the several kinds of Colic; but observe, that where, notwithstanding the usual methods of relief being made use of, the pain proves obstinate, and either continues constant, or often returns, Calomel will frequently be attended with surprizing success.

When

* The colon except in some rare instances, extends itself round the greatest part of the intestines, and is connected with the stomach. Hence it is difficult presently to distinguish a true Colic from the iliac passion, or pain in the small guts, which anatomists call ileum. In like manner when a pain, or flatulence is perceived in the region of the stomach, it requires some skill, and attention to determine whether the stomach, or colon is the part affected.

When this event happens it is probable that acrimony is the cause of the disease, which being enveloped in a mucillaginous matter, vellicates, whilst it strongly adheres to, the coats of the intestines; or that it proceeds from some considerable obstruction in the parts affected. In either case Calomel, by its penetrating deterfive qualities, appears to be a proper medicine.* And

Z 2

its

* Doctor Swan in his ingenious comment upon his translation of Sydenham's works, in a note at page forty-five, tells us that in the iliac passion, when every thing is quiet, a proper quantity of Calomel, given in form of a pill, will more certainly pass than any thing else; and for fear that in a dose of about twelve grains it should irritate the stomach too much, it may be given in a less quantity, and repeated as there is occasion; and an opiate may occasionally be mixed with this, or other pills. And as the most plentiful bleedings ought to be used, and fomentations frequently applied in this case, there seems to be little danger of inflaming by *Calomel*. The

its effects are sufficiently manifest in the following instances.

C A S E I.

Hannah Briscoe of Gloucester, aged fifty-six, ill one week with a Colic, was admitted a patient at the infirmary January the nineteenth 1764.

Having a full pulse, and a stoppage, attended with sickness of stomach, and vomiting, I ordered bleeding, and afterwards

practice I have found most successful, at the time of the disease above mentioned, has been to give three grains of Calomel with the bolus recommended by Dr. Mead, and assisted in the manner prescribed by him in his *monita et præcepta medica, de ileo*. The Calomel in such cases, instead of occasioning any disturbance in the circulation, contributes very considerably towards removing the cause of the disease, and thus brings on a state of ease, and tranquility.

wards Doctor Mead's bolus,* the operation of which was the next morning assisted with a gentle lenitive.

A passage being by these means obtained, I attempted a removal of a slow Fever she complained of, and also the sickness at stomach by a saline mixture with pulv. contrayerv. comp. \mathfrak{z} i. every sixth hour, and ordered that five grains of rhubarb should be added to every dose, 'till a free purging came on. The pain in the bowels not being removed by this treatment, I gave her half a scruple of ipecacoanha in the evening, and after its operation an anodyne going to bed. This last method, and the saline mixture at intervals, were twice repeated, but without effect.

In

* Extract cathartic \mathfrak{z} i.

Op \mathfrak{i} gr. \mathfrak{i} . f. bolus.

Mead. mon. et præcept. de ileo.

In the beginning of February, the pain in the bowels yet remaining, I ordered five grains of Calomel, with a scruple of cordial confection, to be taken at night, and purged off with a lenitive draught the next day. These medicines being twice repeated, February the twenty-first the obstinate pain was entirely removed. After which, the remains of the Fever, and a troublesome cough being subdued, she was discharged cured March the fifteenth.

C A S E II.

William Broughton of Bridgnorth Shropshire, aged twenty-five, ill nine days of a Peripneumonic Fever, was admitted a patient at the Gloucester infirmary December the twenty-second 1763.

His complaint upon the organs of respiration was removed by bleeding,
oily

oily medicines joined to volatile salts and nitre, and a drachm of elixir paregoricum taken in a proper vehicle at bed-time.

As soon as his breath became easy, the patient complained of a violent pain in his bowels, of which he was occasionally relieved by tincturæ rhei spirituosæ ʒvi. tinct. thebaic gtt. 20. This relief being only temporary, January the twentieth I ordered him the following bolus.

R. Confection. cardiac. ʒi.
Calomel gr. v. m. fiat bolus.

This bolus was taken at night, and purged off the next morning. And being repeated with proper intervals, entirely eradicated the disorder. After which the patient was discharged cured, February the second 1764.

CASE

CASE III.

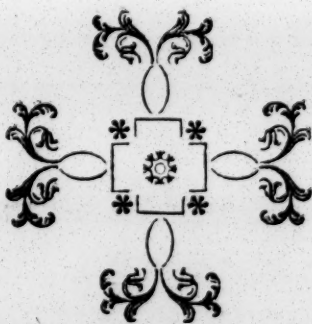
Stiles Bennet aged thirty, ill one year with a Colic, or pain in the bowels, was admitted a patient at the Gloucester infirmary September the fifteenth 1763.

I ordered him three grains of Calomel in a bolus with a scruple of the cordial confection, to be taken the night after his admission, and to be purged off the next day. After the first passages were thus cleansed, I thought proper to lubricate them with oil, and manna.

The pain not being entirely removed by this treatment, I directed five grains of Calomel to be taken in the cordial confection, and after a day or two intermission gave three grains of Calomel in the same manner, but with this difference, that the Calomel was repeated
the

the next night, and not purged off till the day following.

By this method Sept. the twenty-ninth, all complaint being entirely removed, I ordered the Calomel bolus No. 21, to be taken in the usual manner twice a week whilst he staid in the hospital; and October the sixth he went out compleatly cured.



A N

E S S A Y

U P O N

DYSENTERIC FLUXES.

A Dysentery is a painful disorder of the intestines, attended with a diarrhœa, and usually with an effusion of blood by stool. Pain is so necessary a diagnostic of this disease, that Cœlius Aurelianus calls it a rheumatism of the intestines attended with ulceration.*

A a 2

The

* Cœlius Aurelianus de morbis chronicis, lib. 4, cap. 6.

The appearance of blood in the stools, though the most conspicuous, is not by any means a certain symptom of this disorder, since blood often passes from the Liver, and other parts through the intestines, without causing any pain or ulceration.

The cause of this complaint is acrimony, whether arising immediately upon the part affected, or brought to it from a distance. The intestines may suffer abscesses, and ulcerations from local acrimony of the juices, as well as other parts, and they are likewise liable to be affected by any acrimonious humour coming from an abscess in the Liver, or any other of the viscera, by the stimulus of acrid bile, by acrid particles swallowed, as strong purges, &c. or by breathing the contagious effluvia arising from the Dysenteries of other people, as in camp Dysenteries, which frequently run through whole armies.

As

As acrimony appears to be the original cause of this disease, we are naturally led to seek for relief from such medicines as are known to be most effectual in sheathing, and obtunding it, and at the same time lubricate, and heal the excoriated parts. We shall however sometimes find this disorder very obstinate, and that it will persist, notwithstanding we use the means above-mentioned with the utmost attention and assiduity.

Upon such an occasion, considering the effects of Calomel in stopping diarrhoeas, as mentioned in the cases of John Bayley in my essay upon the effects of Camphire and Calomel in Continual Fevers, page 59, and of Elizabeth Longford page 72, and Mary Clark page 84, of the present work, I was encouraged to try it in Dysenteric Fluxes; and had the pleasure to experience equal success with it in the two following cases.

CASE

CASE I.

Daniel Trinder of King's Stanley, aged forty-one, ill one year with a Bloody Flux, was admitted a patient at the Gloucester infirmary January the twenty-sixth 1769.

The first medicine by which the Flux was attempted to be restrained was the astringent mixture No. 5. His head being affected, I ordered a perpetual blister to his neck, and a good draught of the common emulsion of the London pharmacopœia to be taken three times a day.

February the sixth, suspecting that the disorder might possibly proceed from inward piles, I gave him the sulphur electuary No. 13. This not succeeding I ordered a volatile julep with oil, with a view to the complaint in his head, and to sheath the acrimony of the discharge

discharge. I next attempted to brace the relaxed fibres with the bark, and to relieve his head with volatile tincture of valerian. Then the aromatic electuary No. 4, was directed, and half a scruple of ipecacoanha given as an emetic, by way of revulsion. In this manner going on unsuccessfully to the middle of February, I then ordered

Calomel gr. iii.

Rad. rhubarb. pulv. gr. v.

Conf. cynosbat. q. s.

Fiat bolus fumendus hora somni.

This answered so well, that I ordered a repetition of it February the twenty-eighth, and March the second gave orders for it to be repeated twice a week whilst the patient continued in the hospital, which was to March the sixteenth, when he was discharged cured.

CASE

CASE II.

Samuel Merret of Gloucester, aged thirty-five, ill ten weeks of a Bloody Flux, was admitted a patient at the Gloucester infirmary September the seventh 1769.

The common astringent medicines, as bolus ad diarrhœam No. 15, mistura astringens No. 5, and electarium aromaticum No. 4, being all administered without any good effect, September the sixteenth I ordered Calomel gr. iii, opii gr. i. to be given with conserve in a bolus at bed-time.

This succeeded so well, that I ordered the same medicine to be repeated September the eighteenth, by which the disorder was entirely stopped. After continuing in the infirmary ten days, without any return of the complaint,
but

DYSENTERIC FLUXES. 193

but on the contrary being much improved in his appetite, and strength, the patient was discharged cured September the twenty-eighth.

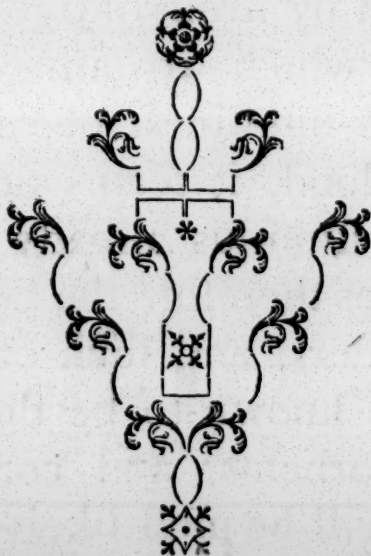
N. B. Both these patients drank the decoctum album No. 22, for common drink all the time of their continuance in the hospital.

From the remarkable success of Calomel in the above cases we are not to conclude that it may be used as a general medicine in Dysenteries. For where the disorder arises from ulcerations caused by strong purges, or other stimulants, which, irritating the tender coats of the intestines, occasion an effusion of blood, it seems improper to add to the stimulus already too great. In such cases therefore the boles, testaceous powders, and such other medicines as are known to be the most effectual absorbents, and correctors of acrimony will be most likely to answer

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our purpose. And where the mucus lining the whole course of the intestines happens by any accident to be abraded, there, oily or greasy substances, by their healing balsamic qualities, have been known to have supplied its place with the greatest advantage. But where acrid bile, or any other acrimony, lodged in a gross, or viscid matter keeps up this disorder, there a removal of the cause takes away the effect, and in such cases it appears most reasonable to expect the desired success from Calomel.



A N
E S S A Y
U P O N
C A L O M E L.

SECTION I.

Of the Preparation of Calomel.

HAVING in the cases described seen such a variety of effects produced by Calomel, we are naturally induced to enquire into the manner of its preparation.

Calomel is formed by a combination
of crude mercury with corrosive sublimate,
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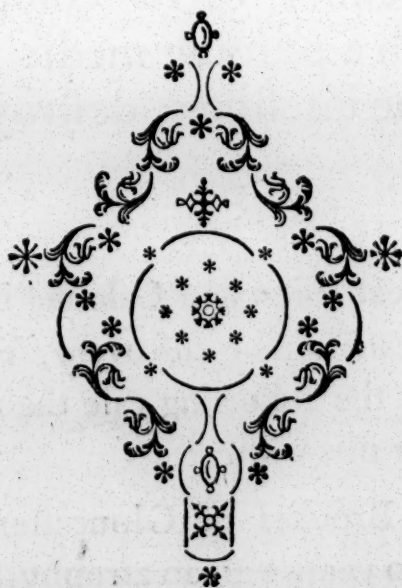
mate, which last is a salt† of Mercury. The basis of this salt is pure quicksilver, and the other part the strongest spirit of sea salt that can any way be obtained, so as here to appear in a solid form. By means of this acid spirit this preparation is most violently corrosive, being a lapis infernalis of mercury, converting all parts of the body it touches into an eschar. Yet if a small quantity of this corrosive sublimate be given with a large quantity of a smooth diluting liquor it penetrates the inmost recesses of the

† Boerhaave in the 195th process of his chemistry says, that the common mercury sublimate is a true vitriol of mercury, though semivolatile. And Dr. Shaw observes upon it that quicksilver is reduced to an imperfect vitriol with spirit of nitre, and to one that is perfect with spirit of salt. I might therefore be justified in calling this concrete a vitriol, but as other writers have called it a salt, which term I rather approve of, I have followed their example, although I am sensible that some exceptions may be taken to this denomination.

the body, and produces very signal benefit in many obstinate disorders.*

A portion of this corrosive sublimate being by trituration well mixed with fresh mercury and sublimed, its corrosive quality abates, by means of this fresh combination, and it thence becomes mercurius dulcis, dulcified or mild mercury. If this sublimation be repeated seven times, it is then called Calomel.

* Shaw's chemistry vol. 2, pages 309, 310.



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SECTION II.*Of the general Operation of Calomel.*

BY whatever inherent qualities mercurial preparations act upon the human body, thus much is however certain, that by joining Calomel to another medicine of a peculiar virtue, its operation is commonly determined by the propensity of its companion. If given with a purging medicine it exerts itself in the intestines, destroys worms,* and

* The great efficacy of Calomel in worm cases is by no means a new discovery, but I think its operation in the following case the most extraordinary I ever met with.

William Brookes of Gloucester, aged four years, ill two years with an atrophy, was brought to the infirmary May the fifth 1768. Absorbents

and is remarkably effectual in bringing away any viscid foul matter that may be lodged there. Upon this principle I think we may account for the great relief given by Calomel to patients labouring under the dangerous Fevers mentioned in my essay upon the effects of Camphire, and Calomel:* as also for the advantage gained by it in preparing patients to receive the natural, or inoculated small-pox.† And in the present work we may perceive the benefit arising from it in preparing patients ill of Intermitting Fevers for the bark.‡
To

and anodynes proving ineffectual in putting a stop to an obstinate purging he had upon him, I at last ordered two grains of Calomel with five of rhubarb to be given early in the morning twice a week. One or two doses of this medicine brought away at one stool so incredible a quantity of worms as fifty-one in number. They were of the teres kind, and the apothecary at the hospital has informed me they were most of them near, if not a full foot long.

* Page 59. † Ibid. p. 74. ‡ P. 32.

To this may also be added its influence over the Epilepsy, Colic, and Dysenteric Fluxes, with pains in the stomach, and intestines in general: all which disorders have been removed by it, after having resisted other very powerful remedies.

If a purgative medicine be not joined with it, yet will Calomel often purge, by means of the acid residing in it stimulating the intestinal tube. But if, neither by its own virtue, nor by any adventitious assistance it happens not to purge, it then is often found to prove diuretic. By this quality it operates so powerfully in reducing hydropic swellings, as observed in the cases before recited.* And to the same property it is, that we are indebted for its great influence over obstructions, and indurations of the Liver.†

Calomel

* Page 66.

† Page 118.

Calomel being carried out of the body neither by stool, nor urine is often known to operate upon the secretory organs of perspiration, especially if directed by the conjunction of a diaphoretic medicine. Hence it often proves of the greatest service in the itch, leprosy, venereal eruptions, and most cutaneous diseases; as well as old pains,* and all complaints proceeding from an obstructed perspiration.

Its next objects are the salivary glands, where it effects a constant spitting, which increases as you continue the use of the medicine. By this effect of mercury the greatest benefits have been received in disorders thought otherwise incurable. The venereal virus, invincible by all other attacks, is obliged to submit to its superior force; and

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* Dr. Fothergill mentions his great success with small doses of Calomel in the sciatica.—Medical observations and inquiries vol. 4, p. 69.

even excreffences of the bones themselves have been often reduced by it.

That this train of reasoning is just we are assured by our never failing guide well established experience. For when mercury, or its preparations have proceeded to, and made considerable progress in, its fourth stage of action the salivary glands, yet may their violence commonly be moderated, or even entirely restrained, by promoting any of the other secretions, as by stool, urine, or sweat.



SECTION III.

*Whether Calomel acts upon the Solids
or Fluids.*

DOCTOR Cullen, who thinks that mercury acts upon the solids rather than upon the fluids, in the manner formerly supposed, says, that all the effects of mercury may be explained by looking upon it as a stimulant.

Its operation upon the various organs of secretion, in the manner I have mentioned, he accounts for upon this principle, and as other arguments for its acting in this manner adds---That it never acts but in an acrid condition, discoverable by its metallic cupreous taste in the mouth:---That a salivation can be excited by its external applica-

to the salivary glands :---That its effects are always accompanied with some degree of Fever and inflammation :-----That its effects in ulcers are plainly derived from its stimulant powers producing that degree of inflammation necessary to the being of good pus :---And that it produces these effects much better by external, than internal exhibition.

In proportion he says as these proofs of the stimulant power of mercury are convincing they weaken all others that may be alledged for any other method of action.*

Boerhaave, and other advocates for the action of mercury upon the fluids say, that the foetor of the saliva, the tumid flaccid gums, and the blood ready to flow out of them, all prove a septic power in the mercury.† And experience

* Cullen's lectures on the materia medica, p. 450.

† Boerhaav. de viribus medicamentor, p. 161.

experience shews that mercury is hurtful in the scurvy.

In answer to this Doctor Cullen says, its effects in the scurvy may be from its irritation and stimulus, and all other stimulants have the same effect in aggravating the scurvy. He imagines therefore that it has this effect, only when accumulated in large quantities in the salivary glands, by which it stimulates, and occasions a greater flux through them; but that it does not, by inducing a dissolution, occasion the blood to discharge itself by this outlet.*

As to the foetor of the saliva, he says it can be produced without mercury; and that there is no instance of an increased secretion being kept up for any length

* The Doctor adds that he imagines the salival glands only to be affected by the mercury, and not the other parts of the body.—Cullen's lectures, page 448.

length of time without the same symptoms occurring.*

In a salivation he says the blood is as strong as at another time, is attended with inflammation, and has a crust on it, which may indeed be said of the scurvy, but then if we examine it, it appears denser than in that disease. And after the operation of mercury is over, he says, no taint appears in the blood, but on the contrary the person is in better health than before.

From these arguments Doctor Cullen says he would conclude (but not with certainty) that mercury acts neither by mechanic, nor septic powers. In the ordinary dose however he says it never
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* This accounts he says for the other effects in the mouth, which arise evidently from the putrid saliva; for no one instance is alledged of a scorbutic putrefactive taint taking place in any other part of the system.—Cullen's lectures p. 449.

can have that effect, at least taken inwardly : but that all its effects may be explained by its acting as a stimulant.*

Doctor Cullen allows that mercury is more particularly, and naturally determined to go by the salivary glands, than any other acrid acting by a common stimulus. Those he says who would account for this by the mechanical power say, that the ponderous particles of mercury, being heavier than the blood, keep the axis of the canal in their passage through the arteries, and that passing more in a direct line by the aorta ascendens, than by the aorta descendens, they are therefore of course necessarily propelled more to the head, than to the other parts of the body.

This hypothesis the Doctor says is not supported by anatomy, on account of the curvature of the aorta ascendens
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* Ibidem and page 450.

before it gives off the carotid arteries, so that the heavier molecules must be reflected into this curvature, and consequently the reasoning must be groundless that is built upon the contrary supposition.*

Another supposition he says is, that mercury breaks down the blood to the size which fits it for passing off by the salivary glands; but that this is very difficult to suppose, and entirely hypothetical. He thinks we may much rather say, that mercury goes chiefly to the salivary glands from a certain attraction to the liquor of those glands, in the same manner as neutrals, by an alliance to the watery parts of the blood, are concentrated in the kidneys.†

Although I am inclined to think with Doctor Cullen that mercury (especially
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* Cullen's lectures, page 450.

† Ibid, page 451.

in the shape of Calomel) produces its surprizing effects by acting as a stimulant; yet that the texture of the blood is, in consequence of mercury taken, broke down to the size which fits it to pass off by the salivary glands is not entirely hypothetical, I am convinced by the following unfortunate case.

A woman of about thirty coming under my care for a gutta serena I gave her Calomel; but was soon obliged to desist from its use, upon finding that her mouth was presently affected with the smallest doses.

She afterwards was under the direction of another physician, who, being ignorant of the observation I had made, administered Calomel more liberally than I had done: the consequence of which was, that a violent salivation ensued, which could never be restrained, and the patient died under it; the blood, of a dilute colour, flowing with

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the faliva, in the manner I have mentioned.

The same observation I also made upon an old scorbutic female patient in the Gloucester infirmary, who fell into a violent salivation upon taking a very small quantity of Calomel, but recovered. In the last case the blood came from the gums, in the first from the lungs, and salivary ducts, yet this patient had no hectic appearance, but seemed strong, and healthy previous to the salivation.

It is remarkable that Boerhaave, who is an advocate for mercury acting on the fluids, seems to think that it may act upon the solids also. For although he says that it attenuates the fluids, yet he affirms that it corroborates the solids.*

And

* Boerhaave de viribus medicamentorum, p. 141. This however is meant of the vitriolic salts of mercury, as Calomel, and corrosive sublimate given in small quantities only.

And Doctor Cullen, notwithstanding he says, that all the effects of mercury may be explained by its stimulating power over the solids, yet modestly declines pronouncing absolutely, that it does not act upon the fluids.

Boerhaave says that dreadful purgings, and salivations have been occasioned by corrosive sublimate.* And the ingenious, and accurate Doctor Wall of Worcester, whose extensive practice leads him to the knowledge of many uncommon cases with regard to diseases, and the operation of medicines, has informed me, that he knew an instance where an immediate salivation followed taking the same medicine.

From the celebrated Doctor Cullen we learn, that the acrid preparations of mercury stimulate the stomach, and in

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* Boerhaave de viribus medicamentorum, page 161.

consequence of that perhaps the whole system by consent.* In the case mentioned by Doctor Wall the operation of the corrosive sublimate upon the salivary glands was so sudden, that it must certainly act upon the stomach only, and from sympathy upon the salivary glands. And to the same cause I imagine we may attribute the salivating efficacy of Calomel when given in small doses to one person, whilst another shall take ten times the quantity without any such effect being produced.

* Cullen's lectures, page 448.



T H E

C O N C L U S I O N.

THAT mercury and its preparations do not act upon the fluids, in the manner formerly supposed, is I think sufficiently evident from modern observations, and experiments. And that they do not act upon the solids only, as stimulants, does not appear to be fully demonstrated. An absolute determination of this point is undoubtedly of very considerable consequence in practice, and therefore much to be desired. But until that event happens, we must have recourse to experience for direction in the use of this powerful mineral, and thence learn how far, by a prudent administration, we may depend upon it as serviceable to mankind.

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This I have attempted in one of its preparations, Calomel, by shewing what success I have had with it in a variety of obstinate disorders; and have endeavoured to prove that, unless it is given in an imprudent manner, its use will not be attended with any bad consequences. How far I have succeeded in my design must be left to others to determine. All I can say farther upon the occasion is, that, in describing the cases recited, I have been directed by the rules of truth, and justice. And if I have given a misrepresentation of any of them, or drawn any false conclusions, I shall be glad to have my errors pointed out, and amend them.



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